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High Vitamin B_{12} Content... Another Reason for Liberal Meat Intake

According to rapidly accumulating clinical and laboratory observations, the daily ingestion of liberal quantities of meat can effect profound physiologic benefits due to the significant content of vitamin B_{12}, not only in liver and kidney, but also in muscle meats.

Muscle meat is a good source of the newly isolated vitamin B_{12}; liver and kidney are especially high in their vitamin B_{12} content, while plant foods are negligible sources of this nutrient.[1] By rat assay, the minimum amounts of vitamin B_{12} in muscle meat range from 0.5 to 3 mcg. per 100 Gm.; minimum values for beef liver and kidney are 15 and 20 mcg., respectively.[2]

B_{12} is among the most potent of known microbiologically active substances.[3] Animal studies indicate that it increases the ability of the normal mammal to utilize protein.[4] With a high protein diet, 0.01 mcg. of vitamin B_{12} per day was found to increase significantly the growth rate of B_{12} deficient rats. In another study, growth response of B_{12} depleted rats was proportional to the B_{12} in the ration within the critical range of 0.025 to 0.1 mcg. per rat day.[5]

About 1 mcg. of vitamin B_{12} daily, administered intramuscularly, constitutes an effective dose in pernicious anemia. In a recent clinical study of young children manifesting vitamin B_{12} deficiency as evidenced by malnutrition and growth failure, oral administration of 10 mcg. of vitamin B_{12} daily for eight weeks induced marked responses in growth; notable increases in vigor, alertness and better general behavior; and improved appetite.[6]

Here again is further evidence of the broad, over-all nutrient contribution meat makes to the dietary. Eaten two or three times daily, it supplies not only generous amounts of high quality protein, but also significant quantities of vitamin B_{12} and other essential B complex vitamins, and of iron.

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BILATERAL POLYCYSTIC OVARIES
(Large White Ovaries)*

GEORGE T. MCCUTCHEN, M. D.
AND
E. C. KINDER, M. D.
Columbia, S. C.

In 1935 Stein and Leventhal[1] called attention to a specific syndrome characterized primarily by amenorrhea and sterility which was associated with definite ovarian pathological changes. Correction of the syndrome was effected in a large percentage of their cases by bilateral wedge resection of the gonads. Their presentation introduced a new concept in gynecology.

The entity of bilateral polycystic ovaries is based chiefly on a syndrome comprising menstrual vagary. Amenorrhea and sterility are the outstanding features of the syndrome. Less frequently observed are hirsutism, headaches, obesity and hypodevelopment of the breasts.

Recognition and acceptance of polycystic ovaries as a disease entity has been delayed. Perhaps this delay is occasioned by the small amount of literature on the subject as well as a failure, to date, to offer satisfactory explanation of the etiological factor or factors.

In 1944 Stein[2] presented a paper on the "Significance in Sterility of Bilateral Polycystic Ovaries." This presentation represented his third five-year report on the subject. It is Stein's[2] belief that the syndrome results from a definite endocrine disturbance and is not congenital, inflammatory, nor degenerative. The pathological counterpart of the ovarian disturbance consists of bilaterally, symmetrically enlarged, pearly white gonads with marked condensation of the tunica. More adequate description of the gonads will be given under the gross pathological findings.

Symptoms

I. Amenorrhea may be either primary or secondary in type. One patient may suffer amenorrhea shortly after the onset of her periods. Another may become amenorrheic after she has had normal cycles throughout adolescent years and on into early maturity. Cycles of hypermenorrhea may herald the forthcoming amenorrhea. Amenorrhea tends to be progressive in nature, but may be occasionally interspersed with a normal cycle.

Amenorrhea may occur late in the life of the sexually mature woman after her cycles have been perfectly normal for years and even after she has borne children.

II. Sterility follows closely the occurence of amenorrhea. The amenorrheic patient obviously has not ovulated. Endometrial biopsy within the first few hours of menses almost invariably reveals a non-secretory endometrium. Basal temperature records indicate that ovulation has not occurred.

III. Hirsutism, in the form of masculine distribution of hair, is at wide variance not only in incidence but in distribution and extent. The face may be covered by a beard so heavy as to require frequent shaving. A male type of escutcheon and heavy coarse hair on the forearms, legs, thighs, buttocks and pubic region are often associated. The areola of the nipples may be ringed with heavy coarse hair. Hirsutism occurred in approximately fifty per cent of our cases. This parallels the percentage reported by Stein[2] in his much larger series.

IV. Headaches, usually frontal in location, and of varying degree of severity was a symptom in about fifty per cent of our cases. This symptom was not included in the syndrome by Stein.[2] The headaches are most severe on awakening in the morning and are almost invariably worse at the time the patient should normally menstruate. Nausea is frequently associated.

V. Obesity, reported by Stein[2] as a less frequent finding in bilateral polycystic ovaries, occurred in only three of our eighteen proven cases.

VI. Hypodevelopment of the breasts. None of the cases here considered showed abnormal breast development.

Diagnosis

As will be shown in tabulated form only nine of the cases in this series were diagnosed preoperatively.

*Read before Annual Session, S. C. M. A., May 1950.

Two additional cases were suspected. The eight remaining cases were operated for other reasons viz. suspected masculinizing tumor of the ovary—1 case; appendectomy—2 cases; ovarian cyst—4 cases; uterine fibromyoma and pelvic endometriosis—1 case. Of these eight cases bilateral polycystic ovaries was found in three cases as an additional finding. In five cases it was the sole finding.

A history of menstrual vagary — particularly amenorrhea — sterility and recurring frontal headaches plus the finding of hirsutism support a clinical presumptive diagnosis of bilateral polycystic ovaries. The additional finding, on pelvic examination, of bilateral symmetrically enlarged ovaries further suggests the diagnosis. Utilization of basal temperature records and endometrial biopsy lend further support. Stein[2] routinely uses pneumoperitoneum and utero-salpingography to corroborate his findings. We have not found it necessary to carry out the study routinely. Basal metabolism and sugar tolerance tests are within normal limits. Roentgenographic study of the pituitary is normal.

If the functional disturbance of the ovaries occurs early in the reproductive life of an individual, uterine hypoplasia is usually observed. If the cyclic disturbance comes later in life, the uterus is usually found to be normally developed. Prolonged amenorrhea may alter the finding—the uterus being small and atrophic.

Recto-abdominal examination of the pelvic organs in unmarried girls may be unsatisfactory. Tenseness and obesity may preclude satisfactory pelvic evaluation.

Suspected cases, where sterility is of concern and cases in which the pelvic findings are not satisfactory

FIGURE 1

Note heavy hirsutism of upper and lower extremities and masculine distribution of pubic hair.

should, we believe, be studied by trans-uterine pneumoperitoneum. This study clarifies the status of tubal patency and at the same time affords study of the comparative size of the ovaries and uterus. Culdoscopic examination has not been used by us but certainly should be useful in questionable cases.

Pathology

Macroscopic Appearance—The ovaries enlarged two to four times are globular, tense and pearly white. The convolutions seen in the normal ovary are absent. The tunica is glistening and thickened. Frequently observed are small vessels coursing through the capsule. Multiple small but variable sized cysts may be seen shining through the tunica. Developing or receding corpora lutea are not present. The capsule is remarkably resistant to the knife. The cut surface shows numerous cysts lined up beneath the capsule. The ovarian stroma as well as the capsule is resistant to the knife. Bleeding from the incised polycystic ovary is minimal and suture without tearing is easy.

Microscopic Appearance—There is extreme thickness of the tunica albuginea consisting of collagenous connective tissue condensation. The multiple small cysts lined beneath the condensed capsule are frequently filled with precipitated albuminous material. The cysts are lined by cellular remnants of granulosa and theca cell layers which at some points are rather well defined and at other points almost completely degenerated.

The cysts represent degenerating graafian follicles from which an ovum was never discharged. Deeper in the dense stroma of the ovary are graafian follicles in various stages of development. They are for the most part immature in type.

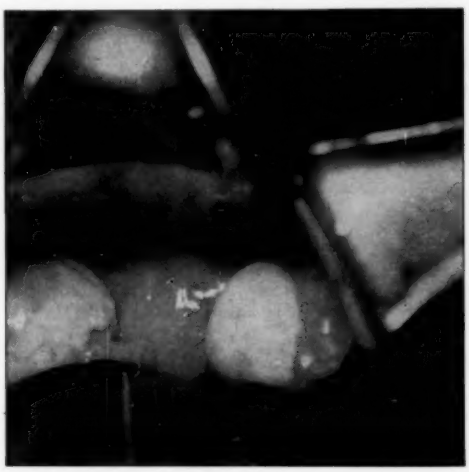

FIGURE 2

Note bilaterally enlarged, smooth, globular gonads which are approximately two-thirds the size of uterus.

FIGURE 3

Symmetrically enlarged, globular, tense gonads, the right showing well formed corpus luteum (see text). Note vessels coursing through the ovarian tunica.

Corpora albicans are conspicuously absent indicating minimized corpus luteum formation.

Microscopically some of the patients show luteinization of the theca interna in the unruptured follicles. This picture, first described by Robinson[3] in 1935 in association with metrorrhagia, is called to our attention by Ingersoll and McDermott[4] in a recent paper on Bilateral Polycystic Ovaries. These authors have found no clinical pathological correlation between luteinization of the theca interna and patients with hypermenorrhea. They advance the question as to whether or not the active cells of the theca interna put out progesterone in the absence of ovulation and plan to study pregnandiol excretion in their future cases.

Etiology

Normal cyclical function of the ovaries is produced by a reciprocal reaction between the pituitary and ovarian hormones. Ripening of the follicle, ovulation, and corpus luteum formation are the orderly results of the pituitary gonadotropins. When ovulation does not occur, the inhibiting influence of the corpus luteum on the pituitary is absent and the follicle stimulating hormone from the anterior pituitary may run amuck. Large numbers of various sized cysts beneath the ovarian tunica may result from such uninhibited stimulation of immature follicles. Whether this is what occurs or whether there is actual hypersecretion of the anterior pituitary is not known. The follicles, unable to rupture through the thickened tunica, may rupture into other follicles and explain the presence of the various sized cysts seen in bilateral polycystic ovaries.

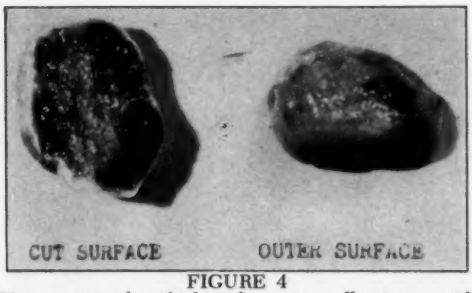

FIGURE 4
Note extremely thickened tunica albuginea with numerous variable sized cysts lying beneath on cut surface.

An interesting experiment relating to etiology of this syndrome was conducted by Weed & Collins[5] of Tulane University. This experiment, reported in 1947, deals with the "Effect of Prolapse of Ovaries on Cystic Degeneration and Ovulation." Ovaries of adult female rabbits were displaced from their normal position by suture of the ovary to the anterolateral abdominal wall. Special care was taken to avoid damage to or ligation of the major ovarian vessels and fallopian tubes. Brood and virgin does were isolated in single cages for two to three months after which active bucks were introduced into the various cages and left for two weeks. Re-examination of the ovaries after this period revealed no fresh corpora lutea in seven of the eight does. In one doe, there was evidence of intra-uterine pregnancy and true corpus luteum formation. The ovaries of the unpregnant does were found to contain small follicles in limited numbers. The question as to whether the vessel changes played a role is suggested but the answer is not established. The authors believe that polycystic disease of the ovaries is produced by follicular atresia resulting from persistent vascular congestion. The follicles in which the ova are dead continue to secrete liquor folliculi under stimulation of the pituitary. Compression of the tunica albuginea results in further impairment of circulation in the smaller vessels leading to vascular congestion, interstial edema and increase in size and weight of the ovary. Vascular congestion further increases and a vicious cycle is established.

Treatment

Treatment of bilateral polycystic ovaries should be designed toward disruption of this vicious cycle. Cure is generally accomplished surgically by bilateral wedge resection of the ovaries. Approximately one-half of the ovarian substance is removed in a pole-to-pole wedge resection made opposite the hylus. Cysts not included in the resected portion are ruptured with the knife point from within the ovarian incision after which the raw surfaces are re-approximated. The ovarian incision is closed with a double row suture, one deep the other superficial, of number 00 plain catgut on a fine, curved, non-cutting needle. This partial resection relieves increased tension within the ovary. The circulatory status of this organ is thereby

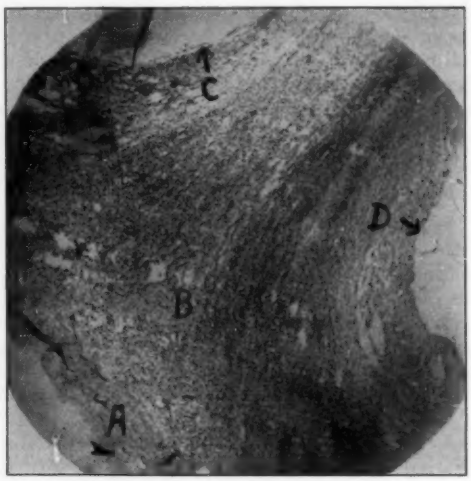

FIGURE 5
Note collagenous thickening of tunic a(A), fibrosis and atrophy of ovarian stroma (B), compression atrophy of cells lining graafian follicles (C & D).

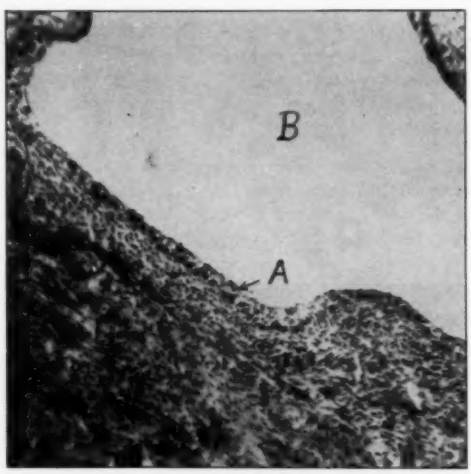

FIGURE 6
Note atrophy and vacuolization of cells (A) lining cystic graafian follicle (B).

improved and return to normal function results.

There is some controversy over the proper handling of cases of bilateral polycystic ovaries.

In opposition to surgical correction are advocates of hormone or x-ray therapy. Good results from utilization of these agents in cases of amenorrhea have been reported by Rubin,[6] Kaplan[7] and others. Stein[2] believes these results were obtained in patients in whom ovarian changes had not reached the stage of cytosis. He further states that "None of these authors has demonstrated either by gynecography, surgery or

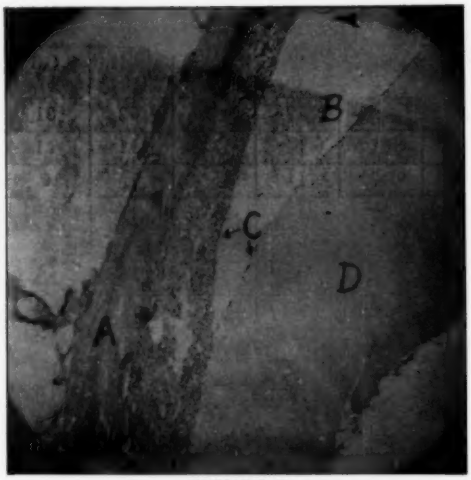

FIGURE 7

Note extreme condensation of tunica (A) with the large cystic graafian follicle beneath (B). Note atrophy of cells lining follicular wall (C) and precipitated albuminous material within follicle (D).

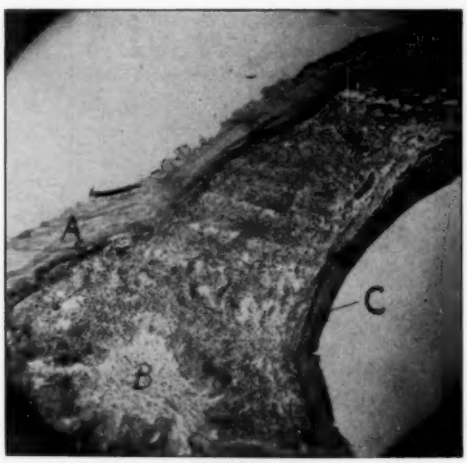

FIGURE 8

Observe extreme condensation of tunica (A). There is an early corpora albicans (B). Note fairly well preserved cellular elements of wall of cystic graafian follicle (C).

otherwise that the patients whom they successfully treated with hormone or x-ray therapy had bilateral polycystic ovaries."

Gilbert F. Douglas[6] (Medical College of Alabama) in his recent review on "Sterility as Related to Benign Lesions of the Uterus and Ovary" states: "The polycystic ovary is a disease entity. If such ovaries are treated conservatively by removing the affected parts either by wedge resection or enucleation, recurrence may never take place and the remaining ovarian tissue probably will function normally."

Tabulated below is data pertinent to eighteen pathologically proven cases and one suspected case of bilateral polycystic ovaries. The suspected case (#8) had total amenorrhea for ten months prior to consulting a physician. Periods of amenorrhea had preceded her total amenorrhea for several years. She showed marked hirsutism and pelvic examination revealed bilateral symmetrically enlarged ovaries. Gynecography corroborated the bimanual examinations but the patient elected not to have surgery done.

Summary and Conclusions

(1) Eighteen proven cases and one suspected case of bilateral polycystic ovaries have been presented. These cases have been collected during the past four years indicating that the condition though not common is certainly not rare.

A preoperative diagnosis of the syndrome was made in nine of the cases. Two additional cases were suspected. Our first encounter with the syndrome was in a patient of Dr. Gerald W. Scurry who was explored because of a suspected masculinizing tumor of the ovary. The ovaries were greatly enlarged and distinctly abnormal in appearance. The adrenals were explored and found to be normal. B. M. R. and x-ray of the sella turcica were normal. Bilateral wedge resection of the gonads was done in an effort to locate a masculinizing tumor. Prior to this time we were not aware of the syndrome reported by Stein.[2]

Of the remaining undiagnosed cases two were operated for appendicitis, four for ovarian cyst, and one case was explored because of sterility and uterine fibromyoma. Of these cases polycystic ovaries was the only pathology in five cases. Three cases were complicated by other pathology.

Thirteen of the cases were married. Six were single.

(2) Sterility was an expressed concern in nine of the cases. Three of these cases subsequently conceived and delivered normal babies. This result falls far short of Stein's[2] excellent results. Sixty-four point five percent (64.5%) of his cases became pregnant. Sufficient time has not elapsed since surgery to draw conclusions regarding correction of sterility but all cases are being followed.

(3) Hormone therapy had been extensively used in nine of the cases without benefit.

(4) Since hirsutism in bilateral polycystic ovaries is at best only halted in its progress by surgery upon the gonads, we believe that early investigation of its etiology is very important. Once hirsutism becomes a fixed pattern it persists.

(5) In two of the eighteen proven cases (case 2 & 3) we admit partial failure in correction of the syndrome. Case two persisted with abnormally long menstrual intervals for approximately a year following surgery. Since then, however, her menstrual interval has been between 32-35 days. Headaches which were severe preoperatively have not returned. Case

	Case							
	HC 1	CS 2	JK 3	KC 4	MFR 5	LET 6	MH 7	GB 8*
Age of Patient	22	32	18	26	17	27	32	31
Marital Status	S	S	S	M	M	M	M	M
Onset of Menses	14	11	14	13	14	14	13	9
Age Onset Amenorrhea	15	15	17	16	15	24	17	21
Pre Op. Hormone Therapy	Yes	No	No	No	No	Yes	Yes	No
Pelvic Pain	No	No	Yes	Yes	Yes	Yes	Yes	No
Headache	Severe	Severe	No	Severe	No	Severe	Mod.	No
Diagnosed Pre Operatively	No	Yes	No	No	?	Yes	No	?

? Suspected
* Not operated

		Case							
		HC 1	CS 2	JK 3	KC 4	MFR 5	LET 6	MH 7	GB 8
Cycle in Days	Pre Op	*180-750	180-730	60-90	90-180	90-150	90-120	60-150	180-450
	Post Op	26-30	28-70	28	28-30	30	28	28	**
Duration of Flow in Days	Pre Op	7	½	14-21	5-8	5	7	5-30	2-3
	Post Op	5	3-4	4	6	4	5-6	5	**
Character of Flow	Pre Op	Scant	Scant	Scant to Hvy.	Scant to Hvy.	Scant	Scant to Hvy.	Scant	Scant
	Post Op	Mod.	Scant	Mod.	Mod.	Mod.	Mod.	Mod.	**
Endometrial Biopsy		Non-Secretory	Non-Secretory	Non-Secretory	Not Done	Non-Secretory	Non-Secretory	Not Done	Not Done
Hirsutism		Marked	Marked	Minimal	Minimal	None	None	Mod.	Marked
Date Operated		4-9-47	5-28-47	6-26-47	4-18-48	9-5-47	10-4-48	11-18-48	**

* No Period Unless on Hormone Therapy.
** Not Operated.

	Case										
	HBB 9	GH 10	MR 11	HW 12	LB 13	BS 14	NC 15	GK 16	KG 17	E Mc 18	SS 19
Age of Patient	34	22	23	21	27	28+	26	20	21	26	25
Marital Status	M*	M	M	S	S	M	M	M	S	M	M
Onset of Menses	11	13	14	12	14	14	14½	10	16	14	17
Age Onset Amennorrhea	21½	14½ Hyper-menorrhea	21	13	17	14	14½	17 Hyper-menorrhea	18	14	19
Pre-Op. Hormone Therapy	Yes**	No	Yes	Yes	Yes**	Yes	No	No	No	Yes**	No
Pelvic Pain	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Headache	Yes Severe	Yes	Yes	No	Severe	Mild	No	No	No	No	Yes
Diagnosed Pre-Op.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	No

* Miscarried 7 Months After Marriage 12½ Years Ago.
** No Period Unless on Hormone Therapy.

		Case												
		HBB 9	GH 10	MR 11	HW 12	LB 13	BS 14	NC 15	GK 16	KG 17	E. Mc 18	SS 19
Cycle in Days	Pre Op	180-540	14-21	40-120	90-450	60-920	60-90	45-90	28-35	28-240	42-90	28-36
	Post Op	33-36	28*	26-32	28-30	30-32	28-30	26-28	28-30	28	28	28
Duration of Flow in Days	Pre Op	1-2	6-7	2-3	5	5	2-5	2-5	6-7	1-5	3	2
	Post Op	5	6	5	5	5	5	4-5	5	5	5	6
Character of Flow	Pre Op	Scant	Heavy	Scant	Mod.	Mod.	Mod.	Scant	Heavy	Scant	Scant*	Scant
	Post Op	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.	Mod.
Endometrial Biopsy		Not Done	Approx. Normal	Not Done	Not Done	Not Done	Not Done	Not Done	Not Done	Not Done	Resting Stage	Not Done
Hirsutism		Very Heavy	Mod.	Mild	Mod.	Mod.	No	Mild	Mild	Very Heavy	No	No
Date Operated		6-15-49	6-16-49	7-8-49	8-9-49	9-23-49	10-19-49	12-10-49	1-5-50	1-6-50	1-31-50	3-23-50

* Only 1 Period 28 Days P. O. Got Pregnant Delivered April 1950.

three had normal spontaneous 28-day cycles from the time of operation through March 1949 at which time she again became amenorrheic. Amenorrhea has persisted with the exception of a short menstrual period in August 1949.

These failures we believe resulted from unwise overcaution in resecting ovaries that were unusually large.

Case one was re-operated a few months ago because of a large hemorrhagic corpus luteum cyst of the right ovary. At operation there was no evidence suggesting a persistence of or a return to polycystic ovaries. There were several omental adhesions to the previously resected ovaries.

(6) The syndrome of bilateral polycystic ovaries is readily corrected in the large majority of cases by surgical attack upon the gonads. Of the various ovarian plastic procedures advocated, bilateral wedge resection with suture is the most satisfactory. The syndrome represents one of the few entities which justifies surgical attack upon the ovaries. The operative procedure is simple—the results gratifying.

Lest surgery upon the ovaries fall into the state of disrepute it once justifiably held, every effort should be made to clearly establish a definite preoperative diagnosis. Any or all of the studies described under Diagnosis should be carried out in questionable cases.

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CARDIOVASCULAR HEART DISEASE*

JOHN F. RAINEY, M. D.
Anderson, S. C.

As the frontiers of medicine are rolled back, we anticipate much help in handling some of the problems that the older individuals present. Until that time is at hand, it is most urgently incumbent upon all of us to keep abreast of the recent medical developments and the more enlightened interpretations of the old problems that have been with us.

Doctor Miller, of Columbia, is discussing emphysema and the complications which arise. The differential diagnosis between the dyspnea of emphysema and the dyspnea of heart failure needs emphasis, and we are sure there will be drawn as straight a dividing line as possible between the two.

Doctor Hicks, of Florence, will discuss the "Lower Nephron Syndrome" and in the course of his remarks there will be emphasized the effect of electrolyte imbalance upon the cardiovascular system. The electrocardiogram gives a good indirect qualitative measurement of this disturbance.

The discussion will be confined to a few remarks concerning:

(1) Paroxysmal rapid heart action
(2) Carotid sinus syncope
(3) Postural hypotension
(4) Coronary and myocardial insufficiency
(5) Thrombo-embolism
(6) Prognosis

Picture in your mind's eye, if you will, a 77 year old patient before you whose apical heart rate and radial pulse rate is 130 per minute. The history is that, without warning, he felt weak while walking down the stairs about two hours after breakfast. There is no history of chest pain. On examination, the patient looks anxious, ashen. The pulse rate is absolutely constant. Blood pressure is 90/80. The heart sounds are distant. There is no past history of any cardiovascular difficulty.

A clinical diagnosis must be made to insure, if possible, the return of the heart rate to normal since an ineffective pulse pressure and a rapidly working heart are distinct liabilities in an arteriosclerotic individual.

While we are thinking of this man there comes across our mind a 65 year old woman who, four hours after an attack of acute chest pain, had no radial pulse and no blood pressure, an apex heart rate of 130 per minute. Vagal stimulation produced gradual slowing and a gradual return to the original rate of 130, and the electrocardiogram showed an anterior infarction with sino-auricular tachycardia. Oxygen, sedation and, most importantly, 500 cc. of bank blood were given, and now the patient is enjoying a normal convalescence. We feel that the whole blood successfully ameliorated the shock as the condition was immediately quite different.

The 77 year old man whom we are discussing gives no history of pain, yet he is in shock and this dulls the sensorium for pain.

Another male patient of 75 comes to mind who for years had angina of effort; three weeks prior to hospitalization he was awakened with severe chest pain, which lasted for some hours. He remained in bed at home for three weeks but was hospitalized on account of sudden onset of weakness and palpitation. Examination revealed cyanosis, shock, an apical and radial pulse rate between 140 and 150 per minute, blood pressure of 100/90 and a tic-tac rhythm. The electrocardiogram revealed ventricular tachycardia.

In the 77 year old man before us vagal stimulation momentarily slowed the heart rate and the anticipated abrupt return to normal heart rate did not come about. The electrocardiogram showed nodal tachycardia which, to all intents and purposes, is the same as auricular tachycardia except that instead of the displaced pacemaker being in the auricle, it is in the auriculoventricular node.

In the 65 year old woman with the sino-auricular tachycardia, a return of comparatively normal function was obtained treating shock; the rapid pulse rate of the 75 year old man was corrected rather suddenly, after 18 grains of quinidine in 6 hours. The nodal tachycardia of the 77 year old man terminated one hour after 3 grains of quinidine. In the treatment of auricular tachycardia and/or nodal tachycardia there are other therapeutic agents equally effective.

There are two other types of paroxysmal heart action: auricular flutter and auricular fibrillation. Each may become permanent.

It seems to me that auricular flutter is largely an electrocardiographic diagnosis. The ventricle rate is usually so variable due to the irregular response to the auricular impulses and the vagal response so indefinite that we can hardly make the diagnosis clinically. Unlike the other types of paroxysmal heart action, the circumstances surrounding the onset offer no clues. The abnormality usually disappears with over-digitalization; if not, quinidine may be used. Others advise digitalis first and then quinidine.

Paroxysmal auricular fibrillation may and can occur during the course of acute infections, in thyroid disease, coronary thrombosis, rheumatic endocarditis, acute and chronic, and frequently for no discernible cause. If the condition is anticipated as frequently as

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it may, quinidine is preventive. After it develops quinidine is corrective.

It seems to me that whenever one is in doubt in regard to the specific type of paroxysmal rapid heart action, quinidine is the safest and most effective drug.

The problem of postural hypotension is a common and unsatisfactory one. The symptoms range from momentary dizziness to syncope. The most extreme case of which we have record is that of a 73 year old hypertensive widow who suddenly fainted for the first time on arising from her chair. This recurred time and time again and finally she was hospitalized for study. The recumbent blood pressure was 180 systolic, 110 diastolic; the blood pressure, when supported in upright position, was not obtainable. This patient remained bedfast and died of an intercurrent disease. The most common type is that recently presented by an arteriosclerotic woman of 65 who had a recumbent blood pressure of 130/90, but standing had a blood pressure of 90/80 and a pronounced tachycardia. Hip length rubber stockings, an abdominal support and sleeping in the so-called "head up position" have helped her. We felt that the latter maneuver would perhaps "tone up" the vasoconstrictor reflexes.

It is not clear where the fault is in these cases. It has been shown to the satisfaction of some that in normal individuals there is a momentary hydrostatic fall in blood pressure at the level of the aortic arch. In arteriosclerotic individuals there is quite a delay in return of the blood pressure at the aortic arch level to normal. It is assumed that the proprioceptor end organs in the aortic arch area are damaged by the degenerative process and the lightly endowed reflex becomes more or less non-existent; therefore, the frequency of postural hypotensive episodes in the aged.

Be that as it may, we must always consider the hyperirritable reflexes of the carotid sinus when dealing with syncope. Cardiac standstill, sudden fall in blood pressure, or dizziness, stupor and convulsive movements are types of reaction to these hypersensitive reflexes. Recently we saw a 65 year old man who complained of periods of diplopia, stupor and generalized twitching of muscles. Slight carotid sinus pressure reproduced the diplopia, stupor and muscle twitching with cardiac standstill. This patient succumbed to a right cerebral thrombosis several weeks later. Ephedrine and atropine may be tried and sometimes resection of the carotid body may be necessary, though mortality is high.

It seems that a few remarks may be in order in regard to myocardial and coronary artery insufficiency.

Dyspnea on exertion, nocturnal dyspnea, pulmonary and/or hepatic congestion, dependent edema, singly or in combination with or without a regular cardiac rate, are indications for digitalization, and usually a permanent maintenance dosage.

Dehydration therapy is now routine for all cardiacs. Latent edema is avoided just as diligently as patent edema. Ammonium chloride is, in itself, an excellent diuretic. Continuous use of ammonium chloride lessens the frequency and quantity of mercurial medication.

Intractable cardiac failure may be due to excessive low blood chlorides.

Again, the sodium and water loss during a mercurial diuresis may be so great that a pseudo-Addisonian crisis arises and replacement therapy is an emergency procedure.

Too much discomfort can be produced by opiates. This may be eliminated by the simultaneous use of an opiate for pain and a barbiturate for anxiety.

The most frequent cause of death in congestive heart failure is pulmonary embolism and infarction. Anticoagulent therapy has been introduced to eliminate the possibility of thrombus formation anywhere within the vascular system. The use of anticoagulants is not simple and if their use is impossible on account of undependable laboratory facilities, the calculated risk can be lessened by:

(1) Early ambulation
(2) Straight leg resting (specifically do not use double Gatch mechanism or pillows in popliteal space for comfort, or any other reason)
(3) Passive exercise of the extremities
(4) Venous litigation with appearance of calf muscle tenderness .
(5) Cautous use, if not elimination, of antibotic therapy

Prognosis in heart disease must always be guarded, yet I feel there is entirely too much anxiety and hopelessness attendant upon the diagnosis and treatment of heart disease.

Our ideas in regard to longevity and activity with angina pectoris, coronary thrombosis and myocardial insufficiency will change with an increasing accuracy in diagnosis and experience.

We have seen angina pectoris disappear following coronary thrombosis; we have seen angina pectoris disappear as time allowed for the development of an adequate collateral circulation, and lately we have seen all historical evidence disappear when the individual thusly affected developed a reconciliation within himself, no doubt, along with his collaterals.

All vestiges of bundle branch block may disappear and even if the condition remains, those with a long experience recite specific cases that are known to have had a bundle branch block for 20 years.

What it is that allows some to live long and others to die soon confounds the mind and experience, and we can only say, with Hypocrates, "Experience is fallacious and judgment difficult."

CONGENITAL HYPERTROPHIC PYLORIC STENOSIS*

A REVIEW OF 329 CASES

By
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Newberry, S. C.

In the present series 329 unselected cases of congental hypertrophic pyloric stenosis had pyloroplasties performed between the years 1919 and 1949 at The Children's Hospital, Washington, D. C. It is the purpose of this paper to present the existing data gleaned from the records.

Of this number 265 (80%) were males against only 64 (20%) females. This is entirely out of proportion to the incidence of male and female births, and is also entirely beyond explanation.

Previous reports comment on the low incidence in negroes. There were 23 (7%) cases of this race. Of these, 22 (95.6%) were males.

There is a definite tendency for the anomaly to occur in first-born children. The incidence of first births numbered 171 (64.5%). Second births were 18.4%; third births, 12.4%; and fourth, fifth, seventh, and eighth births were each roughly 1% more or less.

Only 107 (33%) of these patients were entirely fed by formula. Some consider this finding an indication of the general proportion of breast-fed children rather than of the susceptibility to this defect.

One patient had an older brother who had a pyloroplasty. Also two patients had older brothers to die of pyloric stenosis. One patient had two first cousins who experienced pyloroplasties for this condition. One patient's mother and another's father had pyloroplasties. From this it appears that there is also a tendency, though not strongly marked, for more than one case to occur in the same family.

Two of these patients, being twins, were operated upon each on the same day at the age of seven weeks and a large tumor was found in each case. Their older brother was six years old at the time and did not have pyloric stenosis.

Another patient had a twin who also experienced a pyloroplasty at about the same time at another hospital. Another was one of twins, yet his twin had no evidence of pyloric stenosis. Many believe there is undoubtedly a genetic basis. As yet the method of inheritance is certainly undetermined and an environmental factor may play a considerable role in its production.

Two of these patients had large umbilical hernias which required surgical repair at a later date. One had a cleft-palate. These were the only developmental defects noted in this series in conjunction with pyloric stenosis.

It was noted that the age of onset of symptoms was more likely to occur between the second and third weeks. Of a total of 321 cases, 87 (27.1%) experienced vomiting at the age of two weeks and 81 (25.2%) at the age of three weeks. Symptoms were present from birth in 36 (11.2%) cases and during the first week of life 33 (10.3%) noted vomiting. 44 (13.7%) developed symptoms during the fourth week. The fifth and sixth weeks each revealed only 5.2%. During the seventh, eighth, ninth, tenth, and twelfth weeks, respectively, less than 1% experienced the origin of symptoms.

In comparison with the age of onset of symptoms, of the 329 cases reported 80 (24%) had a pyloroplasty performed during the fourth week of life. During each of the third, fifth, and sixth weeks of life, 15% of the cases underwent operation for pyloric stenosis; while only 6% were operated on during the second week of life. 8% underwent surgery in the seventh and eighth weeks respectively. During each week from the ninth to the sixteenth less than 3% experienced surgery. One infant each had a pyloroplasty performed in the twenty-third and twenty-fourth weeks of life. These were the oldest infants in this series to have operation for pyloric stenosis.

Of the several important symptoms of pyloric stenoses, and the one which usually attracts the physicians' attention, vomiting is the most prominent. It was noted in every case of this series and in each case marked the onset of the condition. The onset may be sudden or gradual. Davison makes the point that the older the child the more likely is the onset to be abrupt. The vomiting which may be precipitated by the ingestion of only a few drops of food rarely begins as the projectile type, but in almost all of the cases promptly became so. In all the cases the vomiting was related to feeding. In every instance there was no bile present and the vomitus was strongly acid. There was always no initial anorexia and the child would nurse or take the bottle immediately after the vomiting ceased.

Most of the other symptoms of pyloric stenosis are a direct result of vomiting and, therefore, occur with considerable regularity. The bowels fail to move normally, not from constipation but because there is no intestinal residue. In this series there were scanty stools in 98% of the cases, while actual diarrhea was noted in only 2% of the babies. The stools as a rule

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were small and composed of mucus and bile.

Peristaltic waves across the epigastrium from left to right could be observed in 98% of the cases. Only seven cases (2%) did not show this feature. These waves appear shortly after the vomiting has begun and are best seen just after food has been taken and persist long after vomiting has ceased. When reaching the impermeable pylorus the waves appear to cease.

Such babies are usually strong and well at birth. In some series they are said to be stronger and weigh more at birth than the general average of 7½ pounds. In this series the average birth weight was 7½ pounds; the average weight at onset of symptoms was 7½ pounds; and the average weight at operation was also 7½ pounds. This rapid loss of weight is particularly striking because it occurs at a period when there should be rapid gains. The average weight following operation at the time of discharge from the hospital was 10½ pounds.

There has been considerable controversy about whether or not a tumor can be palpated. The hypertrophic pylorus can be commonly felt as an "almond-shaped" tumor just beneath the right lobe of the liver. In this series the tumor was palpated in 241 (74%) cases. No tumor was felt in 71 (21.7%) cases, and equivocal in 14 (4.3%) of the cases reported. There are many techniques for examining the tumor which are most important and should be mastered by those treating this condition especially as some surgeons will not operate until they do palpate the tumor. The presence of a tumor is pathogmonic of pyloric stenosis.

As a rule an elevation of temperature was not noted until dehydration, which tends to come on rapidly, appeared; or until infection ensued. In this series 93% of the babies were greatly dehydrated and 95% were malnourished. Just as in any high intestinal obstruction, ketosis and alkylosis occur and glycosuria is occasionally noted. The dehydration leads to a scanty urine and a dry wrinkled skin. The urine contains very little or no chloride. Alkylosis manifests itself clinically in most cases in the form of irregular shallow respirations and frequent periods of apnea. A few cases experienced tetany manifested not by carpopedal spasm but by muscular rigidity and rarely by a convulsion.

The chief diagnostic discussion at the present time centers about whether or not X-ray studies should be made. Ladd states that if the five cardinal signs are present—projectile vomiting, scanty stools, loss of weight and dehydration, visible peristalsis, and a palpable tumor—X-ray is neither necessary or desirable. Others not in favor of X-ray studies state that barium in the stomach at operation adds to surgeon's difficulties; increases the possibility of opening into the duodenum; that lavage to remove the barium is an unnecessary tax on the child; and may be misleading. On the other hand, it is said to be useful to define the degree of obstruction and the amount of retention. It is essential if the symptoms begin shortly after birth to establish the presence or absence of duodenal atresia. In the series of 329 cases, 55 (16%) babies received barium X-ray studies prior to operation. In 47 (85%) of these cases a large dilated stomach was reported and from 90 to 100% retention after 3½ hours. In each of these cases a large tumor was demonstrated at operation. In six cases or 11%, the X-ray studies reported either a normal or slightly dilated stomach which emptied in a normal manner. In each of these cases a large pyloric tumor was demonstrated at operation. In two cases (4%), the stomach was seen to be dilated but at the end of 3½ hours there was 50% retention of the barium in the stomach. Each case at operation had a large tumor.

Pre-operative Preparation: Surgical treatment should be resorted to immediately in those cases which do not respond to medical measures promptly. There should be no delay except for adequate pre-operative preparation. This condition is not a surgical emergency and far more harm may come from operating hurriedly on an ill-prepared patient than by waiting a day or so until conditions are right. Though essential, this pre-operative therapy can be reduced to a few points. Its aim should be to restore the normal electrolyte and fluid balance, the amelioration of malnutrition, and the control of complicating infection. In each of the 329 cases here reported such aims were carried out. It is rather difficult to evaluate the findings as the cases date over a prolonged period of time during which such therapeutic measures as transfusions, fluids, antibiotics, and other drugs and procedures saw their birth. For completeness, in this series of 329 cases, pre-operatively 186 received transfusions, 7 received plasma, and almost all received parenterial fluids.

As a rule most of the patients were given nothing by mouth; however, 150 cases received thick cereal feedings pre-operatively and of these in seven cases it was even necessary to give thick cereal feedings post-operatively. In one instance thick cereal feedings were required post-operatively not having been used before operation.

It is interesting to note that in 227 cases atropine and phenobarbital were given before operation.

In each case the stomach was lavaged just before operation to facilitate exposure and packing. The operative field is small, but it is proportionately much larger than in adults hence the child was in each case surrounded by hot water bags and all portions of the body were kept covered except the immediate operative area.

Pre-operative medication is not necessary and none was used in this series. Experience indicated that premedication with morphine may actually be dangerous.

Drop ether is the anesthetic of choice. So little ether need be used that the patients are awake on leaving the operating room. In this series 306 (93%)

received open drop ether alone; 6 cases (1.8%) were under local anesthetic using 1% novocaine with open drop ether as a supplement; in 9 cases (2.7%) 1% novocaine was the only anesthetic; in 3 cases (0.9%) a whiskey sugar tit was used as a supplement to a local of 1% novocaine; and in 5 cases (1.5%) ethyl chloride was used as an aid to inducing the patient followed by open drop ether. All writers emphasize the fact that from the standpoint of anesthesia the operating team must wait on the patient and not the patient on the team.

A Fredet-Rammstedt pyloroplasty was performed on each of the 329 patients in this series. Since the technical details of this operation are now well known, only the general features of special importance will be discussed.

There were 45 different surgeons participating in this series. A right rectus incision was the one of choice being used in 80% of the cases. In 14% of the cases a transverse type of incision was used. A midline was performed in only 2% and a right oblique was used in 4% of the cases.

A tumor was found in each of the patients in this series. It was described as large in 93% of the cases and small to moderate in size in 7% of the patients.

The chief risk of the operative procedure is perforation of the duodenum at the point where the thick pyloric muscle ends. The success of the operation depends on all of the muscle fibers being separated especially on the gastric side. The accident of opening into the duodenum has been observed most often to occur not with the knife but with the point of the hemostat while spreading the fibers. If the gut is perforated, small bubbles of air or bile will escape and if recognized can usually be easily closed with a small atraumatic type of stitch.

The duodenum was opened in 23 (7%) cases of this series. Only one of these died and that occurred just eight hours post-operatively. None developed evidence of peritonitis.

In the 22 cases in which the duodenum was perforated and lived, it is interesting to note the post-operative care. Two cases were given water in two hours and formula in four hours—recovery uneventful; five cases were given nothing by mouth for eight hours, then water and breast or formula alternately—recovery uneventful; seven were given nothing by mouth for twelve hours, then water and breast or formula alternately—recovery uneventful; three were given nothing by mouth for twenty-four hours, then water and breast or formula alternately—recovery uneventful; one case had nothing by mouth for twenty-four hours, Levine tube stomach suction for twenty-four hours, then water and formula alternately—recovery uneventful; two cases had nothing by mouth for forty-eight hours, then water and formula alternately—recovery uneventful; two cases had nothing by mouth for forty-eight hours, Levine tube stomach suction for twenty-four hours, then water and formula alternately—recovery uneventful.

In only one case in which the duodenum was opened was a drain placed into the wound. It was removed in 24 hours with an uneventful recovery.

Evisceration at the time of operation is carefully avoided as is dragging on the Celiac plexus as the tumor is elevated.

Only 2% of the wounds were closed with through and through interrupted sutures, while 98% were closed in layers.

Thirty-five of the 329 cases were closed using fine catgut for the peritoneum and interrupted fine cotton for the fascia and skin. All the remainder of the wounds were closed using fine catgut for the peritoneum and fascia with interrupted silk sutures for the skin except one case which was closed with fine catgut and wire sutures. Skin clips were used in only one case.

The average length of operating time was 27 minutes. The shortest length of operating time being seven minutes and the longest operating time was seventy minutes.

The post-operative care of the child presents a problem of a rather perverted gastro-intestinal physiology. The head should be lowered until complete recovery from the anesthetic as this prevents the aspiration of mucus. The body heat should be carefully maintained and the diet should be regulated to insure adequate sugar and chloride requirements.

Immediately following operation in this series, as soon as the patient had reacted, water and formula were instigated in 61% of the cases. The other 39% of the patients had water and formula withheld for eight to twelve hours. The most important consideration is that the feedings should be small in quantity. Gastro-enteritis may follow the unwise administration of large quantities of food before the gastro-intestinal tract has regained its normal tone.

All of the patients received intravenous or subcutaneous fluids post-operatively. Only 39% (128 cases) were given blood transfusions after operation.

Atropine and phenobarbital were given in 20 of the cases post-operatively. Five cases received penicillin, one received streptomicin, and two received sulfadiazene post-operatively for either otitis media or other secondary infection.

Following operation only 3% of the cases experienced absolutely no vomiting. The remainder as a rule vomited several times.

All writers emphasize the importance of getting the child out of the hospital as quickly as possible. Brevity of hospitalization after surgery is one of the chief arguments in favor of this type of therapy. In this series the average total days spent in the hospital was seventeen days. The shortest was one day and the longest was one hundred days.

Separation of the wound edges with evisceration occurred in eight cases (2.4%). Four of these cases also had infection of the wound before separation. Separation occurred on an average of the fifth post-operative day. There were no deaths from wound separation and evisceration.

Infection of the wound occurred in twelve (3.6%) cases. Of these, only one died and that was due to acute peritonitis.

In two cases a secondary operation was necessary. The first of these had a pyloroplasty on a large tumor. His symptoms cleared after operation but returned so that seven weeks later a second operation revealed the duodenum to be stenosed at the ligament of Treitz by a thickened band. A gastroenterostomy was performed with complete recovery.

The second case continued to experience projectile vomiting after a pyloroplasty. The wound eviscerated on the fourth post-operative day. Two months later the abdomen became distended and a mass was palpated. A second operation revealed a large pyloric tumor with no evidence of the earlier pyloroplasty. Another Fredet-Rammstedt was performed and after a stormy post-operative course complicated by pneumonia, he recovered.

In this series there was a surgical mortality of 13 (3.9%) deaths following the pyloroplasty. An autopsy was performed in each instance and the findings are as listed below:

1. Died suddenly on fourth post-operative day.
   Autopsy—1. Peritonitis
   2. Gastro-enteritis (diarrhea).
2. Died suddenly on twelfth post-operative day.
   Autopsy—1. Meningitis
   (Staph albus and gram negative bacillus).
3. Died suddenly eight hours post-operative.
   Autopsy—1. Pulmonary atelectasis.
4. Died on fourteenth post-operative day.
   Autopsy—1. Peritonitis.
   2. Atelectasis.
   3. Subdiaphragmatic abscess.
5. Died on eight post-operative day.
   Autopsy—1. Bronchopneumonia.
   2. Peritonitis.
   3. Gastroenteritis.
6. Died on first post-operative day.
   Autopsy—1. Pulmonary atelectasis.
   2. Coagulation defect (prothrombin deficiency as evidenced by bloody fluid in the peritoneal cavity, large bowel, and lack of clot formation in heart and large blood vessels).
   3. Patent foramen ovale and ductus arteriosus.
7. Died on second post-operative day.
   Autopsy—1. Bilateral pulmonary atelectasis.
   2. Patent ductus arteriosus.
8. Died on sixteenth post-operative day.
   Autopsy—1. Gastroenteritis (diarrhea).
   2. Fibrocystic disease of pancreas.
   3. Pulmonary atelectasis.
   4. Hepatitis.
9. Died on fourteenth post-operative day.
   Autopsy—1. Gastroenteritis (diarrhea).
10. Died on tenth post-operative day.
    Autopsy—1. Peritonitis.
    2. Pulmonary atelectasis.
    3. Pulmonary and pericardial effusion.
11. Died suddenly eight hours post-operative.
    Autopsy—1. Pulmonary atelectasis.
12. Died suddenly on second post-operative day.
    Autopsy—Asphyxia due to aspiration of gastric contents.
13. Died suddenly at home on forty-sixth post-operative day.
    Autopsy—1. Bronchopneumonia.

The chief causes of death are pulmonary atelectasis, peritonitis, gastro-enteritis, and bronchopneumonia. Other causes of death being meningitis, subdiaphragmatic abscess, developmental anomalies of the heart, coagulation defect of blood, fibrocystic disease of the pancreas, and asphyxia.

In each of the 329 cases of this series, examination of the laboratory findings prior to operation revealed an approximately normal hemogram and no abnormal urinary findings in any case.

It is interesting to note that 166 of the patients in this series were typed for blood groups as follows:

Type AB— 5
Type A—68
Type B—20
Type O—73

Fifty-eight patients in this series had Rh determinations performed. Of these 48 (83%) were Rh positive and 10 (17%) were Rh negative.

Type	*No. Rh Positive*	*No. Rh Negative*
AB	1	0
A	24	2
B	4	1
O	19	7
	48	10

A follow-up was attempted in each of the 329 cases of this series. Due to the transient population of this area, contact was made with only thirty-six patients. A detailed history and follow-up of each of these revealed only one child to be underweight. The others were well developed, talking and walking at the proper age, and all seemed to be doing excellent in school work usually at the top of the class. All cases have made a normal sociological and psychological adjustment.

Follow-up Chart

Age of Patient	*Number of Patients*
1 year	4
2 years	8
3 years	7
4 years	1
6 years	2
7 years	7
8 years	1
9 years	4
11 years	1
14 years	1

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THE CLINICAL SIGNIFICANCE OF FOREIGN BODY GRANULOMAS: A Review

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There are two varieties of foreign body granuloma—one that is produced by animate and the other by inanimate material. The foreign substances may be introduced from without, as in injuries, or produced in the body, as in necrotic areas where cholesterol or fatty acid crystals are formed. It may be inserted in the form of sutures or ligatures in surgical operations, or fortuitously as dusting powder on surgeons' rubber gloves, even deliberately to escape military conscription or by the cosmetologist for purposes of "beautification." The one structural feature which distinguishes the foreign body granuloma of animate from that of inanimate origin is its proclivity to undergo necrosis either of its cellular elements, as in the tubercle, or of its causative organisms, as in the degenerate fungus of maduromycosis, or of both. The histologic portraiture of the foreign body granuloma is that of a localized or diffuse chronic productive inflammatory lesion with or without necrosis that is characterized by overgrowth of connective tissue or so-called epithelioid cells together with the formation of multinuclear giant cells arranged around or in apposition to the causative substance. The foreign body granuloma due to living organisms is capable of reproduction either locally or at a distance, or both, while the granuloma of inanimate origin remains in the place of its birth for the length of its life.

From the Laboratories of Pathology, Bellevue Hospital

FOREIGN BODY GRANULOMAS DUE TO ANIMATE SUBSTANCES

Tuberculosis.—The tubercle is the most prevalent and familiar example of a foreign body granuloma due to a living substance. If, however, as Prudden and Hodenpyle showed many years ago, the tubercle bacillus is killed and dead bacilli are insufflated into the lungs of rabbits, the bacilli produce epithelioid tubercles which are histologically typical except, of course, for the absence of caseation and inability to reproduce similar changes locally or in distant tissues. The reaction to dead as well as to living tubercle bacilli is due presumably to the insoluble waxy substance with which it is said the tubercle bacillus is provided. In view of the fact that the tubercle is a granuloma that may be due to either animate or inanimate foreign bodies, it is not surprising that granulomas caused by other inanimate substances are structually similar, occasionally identical.

It has recently been stated that tuberculosis is an eradicable disease. An article in Collier's magazine by Dublin and Ratcliff[1] entitled "Let's Wipe Out Tuberculosis" says that "Tuberculosis can be stamped out

completely, once and for all, within the next twenty years. We've the knowledge and the money, and we can easily build the facilities. The only thing we lack is organization for the all out attack." The article further relates that the Metropolitan Life Insurance Company, of which Dr. Dublin is statistician, built a sanatorium at Mt. McGregor for the Company's tuberculous employees with a capacity of 200 beds which was later increased to 350. After thirty years of operation the sanatorium was closed because only twenty-six of its beds were occupied, reduction in the incidence of tuberculosis among the Company's almost fifty thousand employees being due to early detection through routine chest roentgenograms and immediate isolation at Mt. McGregor. The authors recommend mass roentgenologic chest examinations and more sanatoriums for the tuberculous together with subsidies for the patients' families, a program which, if not entirely original, is praiseworthy and should meet with universal approbation. However, the problem presents another aspect, namely, that tuberculosis is not an eradicable disease. For example, the anatomic unit of tuberculosis is the tubercle. There are at least two views concerning the origin of the tubercle. According to one view, it is primarily a productive interstitial lesion that sooner or later undergoes necrosis and ruptures into an air vesicle, producing a minute cavity which communicates with the external air. According to another view, the tubercle is primarily an acute exudative vesicular pneumonitis in which necrosis of the exudate completes the formation of a cavity that communicates with the outer air. In either event, the cavity at first is of slightly more than microscopic dimensions. From this point onward the safety of the patient depends on whether the process of destruction or of repair assumes and maintains the ascendancy. In the meantime, tubercle bacilli are discharged, other persons are infected and the disease is perpetuated. It is conceivable that a cure for tuberculosis will be found. It is inconceivable that the disease will ever be eradicated. The seed-bed, although it may be greatly reduced, will always remain as a focus for the propagation and dissemination of tubercle bacilli. To anticipate the discovery during life of the nearly microscopic tuberculous cavity is expecting too much of man's diagnostic acumen. However, until the cavity is detected and controlled, the disease will be spread by innocent and unknowing harborers of tubercle bacilli and will continue to exist no matter how efficacious curative measures may be in individual patients. Without eradication of the seed-bed it is obvious that there can be no eradication of tuberculosis. Because every tubercle is a minature seed-bed it follows that tuberculosis cannot be eliminated until the last tubercle is destroyed.[2] These considerations seem not to have been taken into account by Dublin and Ratcliff.

The belief appears also to be prevalent that tuberculosis is a disease of youth or of comparative youth and that persons over 50 are rarely infected. Osler, whose "Principles and Practice of Medicine" perhaps more than any other single book has influenced medical thought in recent decades, states that, although one-seventh of the human race dies of tuberculosis, "a large proportion of all individuals become infected before reaching adult life." In Christian's 1947 revision of Osler's book, the statement appears that "fatal tuberculosis . . . is more common between the 18th and 35th years." According to necropsy experience at Bellevue Hospital, pathologically significant tuberculosis in persons under forty is recognized clinically in a high proportion of all cases, while in those over fifty considerable numbers of cases occur but are overlooked clinically. In other words, in many tuberculous patients over fifty years of age insufficient precautions are taken to prevent the spread of the disease by carriers of tubercle bacilli (Medlar).[3]

Boeck's Sarcoid (Lupoid).—Besnier's lupus pernio, Schaumann's lymphogranulomatosis benigna and Boeck's sarcoid are probably slightly different forms of the same disease. The condition has been described in whites, Negroes and in the American Indian, usually in young adults, beginning insidiously and progressing slowly, long remissions or apparently complete recoveries occurring occasionally. It was described by Boeck[4] in 1899 as a disease characterized by multiple benign nodular lesions of the skin of unknown cause associated with enlargement of the superficial lymph nodes. This conception has since been extended to include similar or identical changes in practically every organ in the body, among them the deep as well as the superficial lymph nodes and the spleen, thus simulating the picture of Hodgkin's disease, hence the designation lymphogranulomatosis benigna. Histologically, the changes in sarcoid bear a resemblance to those in tuberculosis, although necrosis is not often observed and giant cells are usually scant. When, however, giant cells occur in the tubercle-like formations of sarcoid, there are sometimes deposits of basophilic granules in them such as are almost never, if ever, encountered in the giant cells of tuberculosis—the so-called Schaumann bodies. In other cases the giant cells in sarcoid contain stellate or asteroid cytoplasmic inclusions that have been variously interpreted as disintegrated elastic tissue, parasitic forms, astrospheres, fibrinoid material and fatty acid crystals. Identical inclusions have been described in other conditions, including the walls of an omental cyst, in obliterating capillary bronchitis, in a myomatous uterus, in the giant cells of leprosy, in a granulomatous lesion of the face following the injection of paraffin and in the giant cells of a regressing corpus luteum. In still other cases of sarcoid the giant cells contain vacuoles of indeterminate origin.

Discussion concerning the nature of the disease sarcoid is focalized almost exclusively on whether it is a form of tuberculosis. In 1910, Kyrle[5] and Morawetz,[6] independently of each other, and in 1914, Sweitzer,[7] injected emulsified sarcoid tissue into guinea pigs and produced lesions in them which were

histologically indistinguishable from those of tuberculosis. However, the validity of these experiments has been challenged on the ground that no precautions were taken to prevent cage infections. In 1941, Longcope[8] reported that, when sarcoid tissue was inoculated into guinea pigs, rabbits and pigeons, no evidence was obtained to support the view that the disease is caused by human, bovine or avain tubercle bacilli. In other cases acid-fast bacilli have been demonstrated in the lesions of sarcoid, but whether these were tubercle bacilli or not is debatable. Furthermore, in cases of sarcoid it has been shown that plasma proteins are increased, especially globulin. On the other hand, Seibert[9] and her co-workers have shown that increase of the globulin fraction also occurs in tuberculosis. Although the cause of sarcoid is unknown, the opinion nevertheless appears to be justified that the lesion belongs in the category of foreign body granulomas due to living substances.

Syphilitic Granulomas (Gumma).—In the tertiary stage of acquired syphilis and in late congenital syphilis foreign body granulomas occur in the form of localized or diffuse gummatous lesions that are characterized, microscopically, by a preponderance of lymphocytes, a sprinkling of epithelioid and plasma cells and an occasional multinuclear giant cell, the latter arranged around tissue debris derived from neighboring areas of necrosis. As a rule, the gumma is solitary, sometimes it is multiple, and any tissue may be involved—skin, mucous membranes, viscera and bone. Among syphilitic lesions the structure of the gumma is unique because it is the only one of them which belongs in the category of granulomas.

In former years the treatment of syphilis consisted in the administration of mercury and the iodides over an arbitrary period of three years and even at the expiration of that time it could not be said with certainty that a cure had been affected. These drugs have since been almost completely abandoned in favor of the antibiotics, notably penicillin, which is not only efficacious, especially in early syphilis, but acts with extraordinary rapidity.

Leprosy.—Among the ancients, leprosy appears to have been a generic term for many varieties of skin disease, some of which, according to Hebrew tradition, rendered a person ceremonially unclean. Throughout the middle ages the disease prevailed extensively in Europe where the number of sanctuaries is said to have exceeded twenty thousand. At the present time, leprosy is known in Iceland, Norway and Sweden, parts of Russia and of China and India and in certain provinces of Spain and Portugal. In the United States the disease is endemic in Louisiana, Florida, Minnesota, New York and Texas, while in the Dominion of Canada foci exist in New Brunswick, Cape Breton and Nova Scotia. The disease is also endemic in the West Indies and in Mexico, in the Sandwich Islands, the Philippines and Hawaii.

Clinically, two main varieties of leprosy are distinguished, the tuberculoid or nodular leprosy, and the anesthetic form. Tuberculoid leprosy is characterized by the appearance of areas of erythema, which later become pigmented and finally develop into nodules. The disease also affects the mucous membranes of the mouth, throat and larynx. In addition, there may be loss of hair and nails together with distortion of the hands and feet and destruction of the bones and joints, loss of phalanges causing shortness of the corresponding digits. When the disease is fully developed, the face assumes the so-called leonine look due to thickening and folding of the skin. The anesthetic variety, the most common tropical form, involves the peripheral nerves and results at first in hyperesthesia followed soon by complete loss of sensation. The leprosy nodules vary in size from miliary lesions to those which are several centimeters in diameter. Histologically, the changes consist of large mononuclear and epithelioid cells with an intermingling of lymphocytes, plasma cells and an occasional multinuclear foreign body giant cell. Between the cells and in the cytoplasm of the giant cells, characteristic acid-fast bacilli are found, usually in great numbers arranged singly or in multiples, and often in clusters containing literally countless hundreds of organisms. Although the bacillus leprae of Hansen is accepted in many quarters as the cause of leprosy, the three postulates of Koch have not been satisfactorily met—the organism is not demonstrable in all the lesions of leprosy, it is doubtful if it has ever been successfully cultivated on artificial media and the disease has not been reproduced in experimental animals.

The treatment of leprosy consists of measures that are either preventive or remedial. In the preventive treatment it is regarded as advisable immediately to isolate the child newly born of leprous parentage and to place it permanently in an environment that is known to be leprous-free. This procedure is a test of parental fortitude but promises protection to a considerable percentage of the offspring. The most recently introduced remedial treatment of leprosy is with the sulfone derivatives, including glucosulfone sodium or promin, sulfoxone sodium or diasone, thiazolsulfone or promizole, promacetin and sulfetrone. Glucosulfone sodium is given intravenously, the others orally. From three to six months of treatment is usually necessary before improvement is noticeable, while from three to four years are required before disappearance of Mycobacterium leprae may be reasonably anticipated. Although treatment by sulfones is regarded by many as promising, there are those in informed quarters who still adhere to the use of chaulmoogra derivatives.

Rheumatic Granulomas.—The curious subcutaneous structures encountered in rheumatic fever, especially in children, were first described by Meynet and occur in the form of nodules attached to tendon sheaths and fascia. They vary in size from a few millimeters to a centimeter or more and are most numerous on the fingers and wrists but are also seen in the region of

the elbows, knees, the spines of the vertebrae, the scapulae and in the scalp. As a rule, they are neither tender nor painful and, in some instances, disappear spontaneously. They appear oftenest in the declining stages of rheumatic fever and have been observed with noticeable frequency in association with chronic rheumatic valvular lesions. Histologically, at least two varieties are described. In one variety, the nodules are composed of a central area of necrotic material around which, arranged in palisade fashion, are numerous large mononuclear cells and variable numbers of multinuclear foreign body giant cells. In the other variety, the nodule is made up largely of rounded or short spindle-shaped cells and an occasional multinuclear giant cell, the latter formed around the remains of degenerate collagen fibrils. Whether the Aschoff bodies, which occur so often in the myocardium, left auricular endocardium and elsewhere in rheumatic fever bear any relationship to the subcutaneous nodules in the same disease is debatable. The Aschoff bodies are usually found in muscle tissues, either the myocardium or the walls of the smaller blood vessels, and are composed of a small central collection of necrotic material around which are numbers of spindle and plasma cells together with an occasional multinuclear giant cell, the cytoplasm of the latter containing foreign body inclusions consisting, apparently, of muscle debris.

Tularemia.—Tularemia is a plague-like disease of rodents which may be transmitted to man by the bite of a flea or tick, or by contamination of the skin or conjunctivae with tissues or body fluids of infected rabbits, hares and the like. The disease, which is highly infective, is caused by Pasteurella tularense, and was first identified in Tulare County, California, hence its name. Tularemia has now been recognized in practically every State in the Union. In the initial stage it is usually manifest as an acute ulcerative lesion followed by necrotic changes in the regional lymph nodes and even in the spleen, liver, lungs and other viscera. In the subsiding stage the lesions become granulomatous and bear a resemblance to those of tuberculosis. Microscopically, a central area of necrosis is surrounded by a layer of radially arranged epithelioid cells, scattered lymphocytes and a few multinuclear giant cells, the latter containing phagocytosed organisms.

Embryonal Fat Cells and Foreign Body Granulomas.—The histologic study of embryonal fat cells in chronic productive inflammatory lesions shows, among other things, that these cells are migratory. This phenomenon is displayed in the pathologic histology of the intestine, mesentery and mesenteric lymph nodes in a disease described in 1907 by Whipple,[10] characterized, clinically, by the presence of a great abundance of neutral fat and fatty acids in the stools, by vague signs referable to the abdomen, and by a variety of fugitive arthritis involving multiple joints. With the exception of the joints, which could not be investigated post mortem, the anatomic changes were limited to that part of the body mechanism which has to do with the absorption of fats, namely, the small intestine and its lymphatic drainage system. The intestinal villi are enlarged on account of extensive deposits in them of neutral fats and fatty acids together with the infiltration of embryonal fat cells and by the presence of multinuclear giant cells. The submucous connective tissue and the mesenteric nodes are similarly affected. In a patient with Whipple's disease who was observed at Bellevue Hospital the histology of a nodule removed from the region of the pancreas during a surgical operation, revealed changes in agreement with those described by Whipple in the intestine and mesentric nodes. The framework of the nodule was composed of scattered connective tissue trabeculae between which were vast numbers of rounded, oval or polygonal fat cells of the embryonal type together with giant cells containing abundant fat granules. Since the appearance of Whipple's paper twenty-one additional cases have been described[11] and the disease is now regarded, at least by some pathologists, as one in which degenerate fat cells produce a diffuse foreign body granuloma.

A localized nodular form of foreign body granuloma involving embryonal fat cells has been described under the dubious designation of adipo-necrosis. The lesion is due to some sort of injury, such as the infusion of excessive quantities of saline solution into subcutaneous fat tissues, usually in the region of the breasts. The nodules are composed of mature connective tissue together with fibroblasts, embryonal fat cells and giant cells, the latter containing remnants of degenerate fat. The lesions may rupture through the skin and give rise to obstinate sinuses.

Foreign Body Granulomas in Maduromycosis.—Maduromycosis is a fungus disease which was first described by Van Dyke Carter as an endemic infection in and around the City of Madura in the Madras Presidency of India. The disease has since been recognized in other districts of India and in Ceylon, Cochin China, the Netherlands East Indies, Africa, Argentina, Cuba, Mexico, the United States and Canada. It occurs most often in arid tropical and subtropical climates among men who are engaged in agricultural pursuits and who work with bare feet. The disease is rare in women. Infection commonly follows the pricks of thorns. Unlike actinomycosis, which is most frequently found in cattle and swine, maduromycosis is apparently confined to man. While infection in actinomycosis is transmissible from one part of the body to other parts, maduromycosis remains localized in the area originally involved. The disease most often affects the foot. Occasionally it occurs in the region of the buttocks, the thigh, the knee and the ankle, and, apparently most rarely of all, the hand. In a review of the literature to May, 1941, Symmers and Sporer[12] found reports of 38 cases of maduromycosis in the United States. Since then 18 additional cases have been reported in North America, or a total of 56. The hand was affected in

only three of these cases: two in the United States and one in Mexico. In one instance of maduromycosis of the hand the patient had never been outside of New York City.

Twenty-two species of fungi belonging to ten genera and four families have been implicated in the production of various types of maduromycosis. In spite of its multiplicity of causes, the different types clinically may resemble one another closely and are divisible into three groups, the commonest of which is characterized by nodular granulomatous lesions in the skin or in the skin and subcutaneous tissues, occasionally involving bone. Spontaneously, or sometimes as the result of injury, the nodules rupture and discharge mucopurulent material containing white, yellow or black granules, the color of the granules depending on the type of fungus concerned, the white or yellow varieties apparently prevailing as in infection by monosporium apiospermum. In the case of maduromycosis of the hand recorded by Symmers and Sporer in 1944, Symmers[13] later isolated a black grain fungus which was identified by Emmons[14] who placed it in the genus Phialophora and named it Phialophora jeanselmei.

Histologically, maduromycosis is characterized by three different types of foreign body granuloma, all of them arranged around disintegrated chlamydospores. One type is immature and the disintegrated chlamydospores in it are displayed against a background composed almost entirely of polymorphonuclear neutrophilic leucocytes together with an occasional foreign body giant cell. The second, or intermediary type, contains clumps of disintegrated chlamydospores and young giant cells, many of which present curious configurations and are poor in nuclear chromatin. Granulomas of this type are often encapsulated, usually by young connective tissue. The third type of granuloma is mature. The giant cells in it engage in phagocytosing waste material derived from the disintegration of chlamydospores. In most instances the mature granuloma is encapsulated by well organized connective tissue. Histologically, maduromycosis could scarcely be confused with any other known disease, more especially with actinomycosis. The granuloma of maduromycosis is formed around degenerate chlamydospores, that of actinomycosis around ray fungi. Both are foreign body reactions but bear only a remote resemblance to one another.

Because of military activities in localities where maduromycosis is prevalent, it is to be expected that numbers of men returning to the United States will be invalided with this disease. Physicians should be on the alert for its appearance in this and other countries where it has been heretofore almost unknown. It seems that drugs such as sulfonamide, penicillin and aureomycin have not thus far been adequately tried in the treatment of maduromycosis. However, encouraging results are sometimes obtained with the use of large doses of iodides. If, on the other hand, the disease is recognized sufficiently early, curettage or even excision of individual nodules as they arise may be undertaken to remove all of the diseased tissue. In the later stages, more especially if bone is penetrated, amputation is advocated by those who have had the most experience with the treatment of this disease.

Blastomycosis.—Blastomycosis is commoner in males than in females and occurs usually in middle life. It is caused by Blastomyces dermatidis, a species of yeast which, in tissues, assumes the form of bicontoured disks, mycelia occurring rarely. Clinically, the disease is divisible into two forms. In one the changes are confined to the skin, while, in the other, they are generalized. Cutaneous blastomycosis is characterized by proliferation of epidermal cells in the form of large, papillary prolongations into the corium containing collections of polynuclear leucocytes together with multinuclear giant cells built around foreign bodies consisting of disk-like budding organisms. The papillomas are closely packed and elevated above the surface as nodules varying in size from a few to many centimeters showing, in the more prolonged cases, areas of cicatrization or healing. In systemic blastomycosis abscesses may occur in any organ in the body, all of them showing collections of polymorphonuclear leucocytes together with multinuclear giant cells enclosing bicontoured disk-like organisms. In cutaneous blastomycosis the disease may persist for months or even for years and is seldom fatal, whereas the mortality in generalized blastomycosis is high. Treatment consists of large doses of potassium iodide combined with radiation. Drugs such as the sulfonamids, penicillin, aureomycin and the like appear not to have been adequately used in the treatment of blastomycosis.

Coccidioidal Granuloma.—Coccidioidal granuloma, dermatitis coccidioides, valley fever, desert fever or California disease, as it is variously known, is due to infection by coccidioides immitis, a species of fungus found in soil. The disease is most frequently seen in the San Joaquin Valley in Southern California but has been encountered elsewhere, especially in regions immediately adjacent, as well as in Utah, Nevada, Arizona and in West Texas along the Mexican border. The primary lesions may be in the skin but more often the deeper viscera are involved. According to Ophüls, there are three clinical types: (1) primary skin infection followed by generalization; (2) primary pulmonary lesions followed by generalization without skin involvement; (3) primary pulmonary lesions and secondary subcutaneous involvement. In addition, there may be primary naso-pharyngeal, pelvic, meningeal or osseous infection. Histologically, the structure of the coccidioidal granuloma is that of a chronic productive lesion in which multinuclear giant cells are built around disk-like organisms that multiply by endogenous spore formation, differing in this respect from the causative organisms in blastomycosis, where reproduction occurs by budding. Unlike blastomycosis

treatment by potassium iodide is of little avail. In coccidioidal granuloma the latter-day antibiotic drugs as yet seem not to have been adequately used.

Monilial Granuloma.—Monilial granuloma is a rare and frequently fatal disease due to infection by the yeast, Candida albicans. It begins in infancy or early childhood, usually in the form of an apparently simple oral thrush, but ultimately involves the finger nails and paronychial tissues and the skin of the scalp and face. It appears that there are only fourteen cases recorded in the literature on medicine.[15] Clinically, the lesions occur in the form of a papular eruption involving the scalp, forehead, nose, cheeks and lips. The papules are highly vascularized and bleed easily. Occasionally the lesions progress to the formation of cutaneous horns. Histologically, the changes in the skin consist of a dense infiltrate of lymphocytes and plasma cells together with multinuclear giant cells, the cytoplasm of the latter enclosing foreign bodies in the form of spores or mycelial remnants.

Regional Ileitis.—The disease which is now called terminal, segmental or regional ileitis appears to have been known to Abercrombie who, in 1828, published the case of a girl, 13 years of age, in whom the clinical and pathologic findings were those of a lesion that might well be interpreted as belonging in this category. It remained, however, for Moore, in 1882, to describe, apparently for the first time, the microscopic as well as the naked eye changes in a case of regional ileitis with intestinal obstruction. Moore reported the absence of tubercle bacilli or evidence of carcinoma and stated that the obstruction was due to "long continued inflammatory changes." No further mention of the condition appeared until 1905 when, in rapid succession, Wilmanns, Moynihan, Robeson, Moschowitz and Wilensky, Crohn and many others recorded cases with sufficient accuracy of detail to establish the condition as a clinical and pathologic entity.

Regional enteritis may affect both the small and large intestine although its site of predilection is in the ileum and especially in the terminal segment immediately proximal to the ileo-cecal valve. The lesion occurs oftenest in young adults and is clinically recognizable because of long continued diarrhea together with the characteristic picture which it presents on x-ray examination; the barium enema forms a cylindrical cast so that this part of the gut resembles a segment of rubber hose. The wall of the affected segment is brawny and intensely red, while patches of fibrin may be present on its serosal surface. On opening the bowel the mucosa is bright red and smooth. In the mucosal surface sunken scars are sometimes visible and areas of ulceration may be present, varying from shallow lesions to those which are deeply fissured, sometimes serpiginous. The mucosal wall is edematous, rubbery to the touch and, in advanced cases, perforations may be present or fistulous tracts may penetrate the abdominal parietes or establish communications between adjacent loops of intestine. Microscopically, the mucosa shows signs of intense acute inflammatory changes and may be covered by slough and fibrinous exudate. Throughout the wall of the gut, but especially in or between the muscle layers, are tubercle-like bodies composed of fibroblasts, epithelioid and giant cells, the latter often containing crystaloid material. It appears that tubercle bacilli have never been demonstrated in the lesions of terminal ileitis.

Lymphogranuloma (lymphopathia) venereum. — Lymphogranuloma venereum is a venereal disease of unknown cause, the primary lesion of which may occur in any part of the external genital apparatus and is usually inconspicuous, consisting of a small, moist and shallow, painless ulcer that may be easily overlooked. The initial sore is followed in a month or more by enlargement of the inguinal lymph nodes due to inflammatory lesions that are nodular and may be acute or chronic. Eventually, the nodule resolves itself, histologically, into palisaded layers of epithelioid cells surrounding a central area of necrotic tissue together with multinuclear giant cells formed around particles of cell debris. The disease is not always limited to the genitalia and regional lymph nodes, but may involve the perineum, anus and rectum, especially in women. Lymphogranuloma venereum is to be sharply distinguished from granuloma inguinale. The latter disease is manifest as a chronic ulcerative lesion which occurs most frequently in Negroes and appears oftenest in the inguinal region, but may involve the external genitals, the perineum, the inner surface of the thighs, the anus, rarely the lips, and in the female, the vagina. According to one view it is a disease of venereal origin; in other quarters it is regarded as an independent entity. So-called Donovan bodies are constant in the affected tissues and by some are regarded as causative, by others as secondary invaders. The disease is endemic in some tropical countries and absent in others. Thus, in certain parts of the West Indies it seems not to occur at all while in British Guiana it is common. Moreover, it presents different aspects in different races. In Negroid peoples the changes are the most pronounced. When other races, such as Indians become infected in a country where most of the sufferers are Negroes, the lesions present recognizable differences in the two nationalities, the growth in the Indian being less coarsely granular and tending to remain localized, whereas in the Negro it spreads extensively. The disease was first described in the United States in 1920 by Symmers and Frost,[16] who observed it in native Negroes, none of whom had ever been outside of the United States. It is now known to be widely prevalent in this country. In the Fiji Islands, the Melanesian immigrants are said to suffer from a disease which, although it resembles the ordinary form of granuloma inguinale, differs from it in that the lesions are softer, more pronounced and spread by contact, so that multiple discrete growths arise. In addition, variations in severity depend on the part involved, growth and destruction being more

rapid on mucous than on cutaneous surfaces. Finally, there is a variety of granuloma inguinale that is attended by such marked obstruction to the lymphatics that it produces chronic edema of the vulva, penis or scrotum, resembling elephantiasis. Histologically, the lesions of granuloma inguinale bear no resemblance whatsoever to those of lymphogranuloma venereum.

(To be continued in next issue)

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CANCER

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CARCINOMA OF THE SKIN

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The most common type of malignancy seen is carcinoma of the skin. This frequency is not reflected in mortality statistics as the curability of these lesions is so high. An appreciable number of deaths each year, however, are due to skin cancer. Patients generally note malignant lesions of the skin early as the majority develop on the exposed surfaces, but their appearance is so innocuous that medical advice is not sought promptly. If, however, the physician maintains a high degree of suspicion, accurate diagnosis by biopsy and appropriate treatment should result in a high rate of cure.

A number of skin lesions are well recognized as conditions in which cancer of the skin is more likely to develop than in normal skin. These should be readily identified by the family physician and, if any unusual change takes place, prompt biopsy should be performed. The premalignant lesions, which include the "precancerous dermatoses," are senile keratoses, keratoses due to arsenic, tar or radiation, burn scars, chronic ulcers, chronic draining sinuses and xeroderma pigmentosum. Moles and nevi are not included as the benign nevi and malignant melanomas will be the subject of a later paper. Leukoplakia has been omitted as this lesion develops on mucous membrane or the junction of mucous membrane and skin and should be considered when these various sites are discussed. Bowen's disease also is not included as most authorities feel that this lesion is frankly malignant, rather than premalignant, and should be so treated.

Montgomery[1] and Ullmann[2] have provided excellent descriptions of the premalignant skin lesions.

Senile keratoses most frequently develop in patients with farmer's skin or sailor's skin. The latter results from chronic exposure to the sun and wind over a period of many years in persons whose occupation keeps them in the open. Certain persons are more susceptible to these skin changes; those who have a fair or ruddy complexion, who burn easily in the sun and do not tan, and who have excessively dry skin.[3] Others are less susceptible; Arabs, South American Indians and Negroes seldom develop senile keratoses and skin cancer despite chronic exposure to the sun.[4]

The typical appearance of the face in farmer's skin is well known. The skin over the forehead, where protection has been afforded by a hat, is smooth, white and pliable whereas in sharp contrast the remainder of the face, the ears and the neck are shiny and red, with areas of pigmentation, chronic hyperemia and telangiectasia. The dorsum of the hands is similarly affected. On this basis the senile keratosis usually develops as fairly discrete, flat or slightly elevated, brown to grayish, keratotic papules or poorly defined, scaling patches. The lesions are usually multiple and vary in size. The scales are frequently shed or picked off and points of bleeding may be noted following their removal. A peripheral zone of erythema and the presence of induration suggest malignant change. From 20 to 25 percent of senile keratoses develop into malignancy and 90 percent of these are squamous cell carcinoma.[1]

Seborrheic keratoses (verruca senilis) are to be differentiated from senile keratoses as seborrheic keratoses rarely become malignant. Seborrheic keratoses are sharply circumscribed, vary in size, and are usually elevated. They have a verrucous, greasy crust which may be wiped off, and are firm and rubbery rather than hard. The color varies from light brownish yellow to a brownish black. Most commonly, seborrheic keratoses occur on the trunk, especially the back. They should be examined periodically but require no treatment other than for cosmetic reasons.

Prevention of the development of farmer's skin is obviously important. If the occupation cannot be changed, then some degree of protection may be given by the application of a material such as lanolin or olive oil. Rothman and Henningsen[5] have demonstrated the protective value against sunburn of para-aminobenzoic acid, using 15 percent in Ruggles vanishing cream. A single senile keratosis in a young patient had probably best be removed whereas in older patients with multiple lesions, careful observation with immediate biopsy of any suspicious lesion is indicated.

Arsenical keratoses develop after the use of arsenic in susceptible individuals, at times many years afterward. The lesions occur mainly on the palms and soles, and are usually associated with a diffuse, raindrop type of arsenic pigmentation. The keratoses vary in size but may be quite large and thick; these are most apt to become malignant. Lanolin or similar ointments may be applied to small lesions but excision will probably be necessary for the larger ones.

Tar keratoses may develop in workers exposed to this material over long periods and the probability of malignant change is present to the same extent as the arsenical keratoses and to a greater degree than the usual senile keratoses. The treatment is the same as that for arsenical keratoses.

From the Department of Surgery and the Cancer Clinic, the Medical College of the State of South Carolina, Charleston, S. C.

Radiation dermatitis as a precursor of malignancy is, of course, very well known because of the thoroughly if painfully acquired knowledge concerning the dangers of radiation learned by the early radiologists, since many of the pioneer x-ray workers died from carcinoma developing in the exposed areas. In patients, malignancy may develop in the area of radiation dermatitis many years after excessive treatment with radiation. The dry, atrophic skin with the characteristic telangiectasia should be observed carefully for keratoses and developing malignancy. Where feasible, excision should be carried out. Further radiation in any form and ultraviolet light are contraindicated.

Burn scars, although very common, are infrequently the site of malignant change. Carcinoma developing in a burn scar, however, is seen frequently enough that inspection of these scars should be carried out at yearly intervals. Should any suspicious change occur, biopsy should be performed. The malignant lesion is usually a squamous cell carcinoma, and extensive removal may be required. If the tumor is on the extremity, amputation is occasionally necessary. *Chronic ulcers*, such as varicose ulcers, are in the same category in that the ulcers are very commonly seen, but malignant change occurs in only a very small percentage of cases. The possibility, however, must be recognized and biopsy performed when indicated. *Chronic draining sinuses*, such as those encountered with chronic osteomyelitis, empyema, fistula-in-ano, etc., are also occasionally the site of origin of carcinomatous change. In the chronic ulcers and sinuses, suspicious areas must be subjected to biopsy.

Xeroderma pigmentosum is a rare congenital lesion in which the skin is abnormally susceptible to solar rays. The children are usually brought to the physician only after malignant areas have developed on the exposed surface. Brockington[6] has studied carefully one family in South Carolina in which a number of children have died from carcinoma of the skin developing in xeroderma pigmentosum, and will report these cases later.

Pathology

For purposes of simplification, only the three most common types of malignancy of the skin will be considered: basal cell, squamous cell and the mixed or basosquamous cell carcinoma. In a series of 1,224 malignant skin tumors seen over a period of ten years, Stout[7] found 605 basal cell and 309 squamous cell lesions, the remainder being the more infrequent types. Stout pointed out that in malignant tumors of the skin growth starts at a focal point and continues centrifugally in all directions. The growth, however, is not at an equal rate and usually is predominantly in one of three directions. It may grow outward from the body surface producing a projection, penetrate inward into the underlying tissues producing ulceration, or grow parallel with the body surface. Generally, the infiltrating type is the most malignant, most likely to metastasize and hardest to eradicate.

The basal cell carcinomas do not metastasize but have marked propensities for invasion and destruction of contiguous tissue including bone and cartilage. Most basal cell lesions which have been thought to metastasize have been found to be basosquamous carcinoma. Squamous cell carcinomas do metastasize to the regional lymph nodes. Taylor, Nathanson and Shaw[8] studied a large series of squamous cell carcinomas on the extremities and found lymph node metastases common from lesions on the arms, feet and legs but less so from the fingers and hands. They found metastases were more likely with lesions of longer duration, larger size and higher grade. The size of palpable nodes was not a dependable guide, although the larger nodes were more apt to contain metastases.

Diagnosis

Basal cell carcinoma occurs chiefly on the upper part of the face, above a line from the corner of the mouth to the lobe of the ear. Andrews[9] has described clearly the appearance of the early lesions. A scaly spot becomes slightly thickened, glistening and waxy or pearly in appearance. In one type, the earliest lesions feel like a small, inverted button. Small, waxy papules may coalesce to form a placque-like lesion, and at the border similar papules fuse to produce the characteristic elevated rolled edge. The center becomes crusted and, after this is knocked or pulled off, another crust forms and so on repeatedly. Other clinical forms occur, in addition to the button and the placque types, the most important being the rodent ulcer. This is a burrowing, mutilating, destructive, ulcerative process which may completely destroy the orbital contents, the external ear or the nose. The ulceration is deep and punched-out, the floor is dirty and the edges crusted. If the crust is removed, the rolled waxy border may be seen.

The squamous cell carcinomas arise usually on preexisting areas of keratosis, predominantly on the skin of the cheeks, ears, pre-auricular, temporal and malar regions and the dorsum of the hands. It typically begins as a warty growth, the keratotic projection comes off and a slightly bleeding base results. This becomes crusted and the sequence is repeated, each time the lesion becoming a little larger until finally ulceration develops. The borders are indurated. The lesion may be superficial or deep projection and invasion may be present. Fixation to deeper structures may occur.

Biopsy

In the majority of cases, a diagnosis can be made clinically and identification of the type can be made in a considerable number on the basis of the site and the appearance of the lesion. A biopsy, however, must always be carried out for confirmation of the clinical diagnosis. It cannot be emphasized too strongly that the biopsy must always be performed, regardless of

the type of therapy to be employed or the confidence of the physician that he can cure the lesion, regardless of type. In small lesions "excision-biopsy" may be done.

Treatment

Ackerman and Regato[4] state, "The treatment of carcinoma of the skin may be reduced to the choice between its destruction by means of radiations or its eradication by means of surgical excision. The choice of therapy depends mostly on the location of the tumor, its extension, and on the history of previous treatment."

Generally, the small early lesions can either be excised or treated by x-ray or radium after biopsy. For a somewhat larger lesion, the site may be of some importance in determining the type of therapy. In areas which tolerate radiation poorly, such as the scalp, or where bone and cartilage are not well protected, such as the dorsum of the hand, excision is preferable to radiation. In large lesions, the location and extent will determine the therapy. Recurrent lesions and those with metastases are usually best treated surgically.

Regardless of whether radiation or excision is used, it is most important that: (1) A histologic diagnosis be obtained, (2) if radiation is used, an adequate dose be administered in the first course of treatment and (3) if surgical excision is employed, a generous margin be obtained on the first excision.

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TEN POINT PROGRAM
OF THE
SOUTH CAROLINA MEDICAL ASSOCIATION

1. Cooperation

To promote closer cooperation and better understanding between all agencies, groups and individuals concerned with providing and improving medical care for the people of South Carolina.

2. Extension of Medical Care

To study constantly the need and availability of medical care in each county of the State and in the State at large.

To promote plans for providing or improving medical care where is a need, particularly in the rural areas.

3. Pre-Paid Hospital and Medical Care

To make voluntary pre-paid hospital and sickness insurance available to all the people of the State (through Blue Cross, Blue Shield, and commercial insurance policies), and to promote the widespread purchase of such insurance.

4. Care of Indigent

To work with local county and state agencies, and with philanthropic organizations, toward securing good medical care for the indigent.

5. Public Health

To support the South Carolina State Board of Health in its broad program of preventing diseases and of safeguarding the health of our people.

6. Health Councils

To support the State Health Council in its announced program. To sponsor the formation of a County Health Council in every county of the state, and to encourage our members to support and to work with these organizations.

7. Hospitals

To promote the expansion of present hospital facilities and the building of new hospitals—where there is a definite need.

To strive for highest standards of professional care in the hospitals in the State.

8. Medical Colleges

To support the Medical College of the State of South Carolina and to bend our efforts toward keeping its standards of education on a par with other medical colleges throughout the country.

To promote good nursing education and good nursing care throughout the State.

9. Education of the Public

To acquaint the citizens of the State with regard to the problems of medical care in existence today, to inform them as to what is being done to solve these problems, and to advise with them as to further plans for securing better health and better medical care for the people of South Carolina.

10. Political Medicine

To prevent political control or domination of medical practice or of medical education.

1951 DUES

ARE NOW PAYABLE

South Carolina Medical Association ------$20.00

American Medical Association ----------$25.00

These should be paid through the county medical society treasurer. Help him out by sending him a check right away.

Those who have not paid their 1950 A.M.A. dues should do so before February 1 or their names will be dropped from the membership roll. A physician who loses his membership through failure to pay dues will be declared in arrears and will have to pay these dues in addition to his regular dues should he want to rejoin the Association.

J. Howard Stokes, M.D.
Treasurer

The Journal of the South Carolina Medical Association

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JANUARY, 1951

NEW YEAR RESOLUTIONS

Might we suggest the following resolutions for our Association for the coming year—the objectives which should be placed on our *must* list for the immediate future:

To promote the formation of a state-wide Grievance Committee.

To submit to the Governor and the General Assembly a comprehensive, state-wide plan for the care of the medically indigent.

To promote actively the purchase of voluntary health insurance, particularly contracts with Blue Cross and Blue Shield.

To cooperate actively with those organizations, state and local, which are concerned with bettering the general welfare of our people.

To support and participate in the activities of the American Medical Association.

To accept our responsibility and to render our service to our country in its all out struggle against communism.

RESOLUTION

The following Resolution was adopted by a Committee of the Committee on Military Affairs of the South Carolina Medical Association:

WHEREAS—GOD IN HIS INFINITE WISDOM
HAS SEEN FIT TO CALL
ONE OF HIS MOST FAITHFUL SERVANTS,
LAWSON PAUL BARNES, AND
WHEREAS DR. LAWSON PAUL BARNES
DURING HIS LIFETIME
EXEMPLIFIED SERVICE TO MANKIND
IN

CURING THE SICK—
COMFORTING THE AFFLICTED—
ENCOURAGING THE DESPONDENT—
SERVING HIS COUNTRY IN THE ARMED FORCES IN TIME OF WAR—
LENDING HIS SOUND JUDGMENT AND UNBIASED OPINIONS TO THE COUNCILS OF MEN—
AND IN REVERING HIS GOD:

THEREFORE—WE THE SOUTH CAROLINA ADVISARY COMMITTE TO SELECTIVE SERVICE ON DOCTORS, DENTIST AND ALLIED SPECIALIST DO HEREBY DEPLORE THE PASSING OF ONE OF OUR MEMBERS LAWSON PAUL BARNES, AND DO EXPRESS TO HIS WIFE AND FAMILY OUR SINCERE SYMPATHY IN THEIR GRIEF AND WE JOIN WITH THEM IN THEIR MOURNING.

WATTS HOSPITAL SYMPOSIUM

The Eighth Annual Watts Hospital Medical and Surgical Symposium will be held at the Carolina Theater, Durham, N. C. on Wednesday and Thursday, February 14 and 15, 1951. An outstanding program has been arranged and will include two days of papers, a clinico-pathological conference and two panel discussions—one on Headache, and one on Respiratory Infections. A distinguished group of speakers will appear on the program. Detailed information may be secured from Dr. J. W. Woods, 410 One Eleven Corcoran St., Durham, N. C.

THE A.M.A. MEETING IN CLEVELAND

(A Travelogue)

December 1.

Three hours, by bus, from Florence to Charlotte; two hours, by plane, from Charlotte to Cleveland—that's traveling. Arrived in Cleveland in the afternoon to find several inches of snow covering the ground. Main streets cleared, side streets with enough clearance for one way traffic. Banks of snow along edge of streets and sidewalks. Temperature 25 degrees. Most cars still in garages although large number on the go. Traffic slow. Crowds of people waiting for street cars and busses. High school just opened today, primary grades still staying at home. Bulldozers pushing snow here and there. Men shoveling snow, boy pulling load of groceries on a sled. Such was the picture of Cleveland five days after its worst snowstorm in history.

After checking in at the Hotel Statler and parking my suitcases in the room, went down to the lobby to look around. Ran into Larry Rember, Director of Public Relations at the A.M.A., and went to supper with him. Larry had paid us a visit recently in South

Carolina. We had a delightful time discussing things in general and public relations in particular. Larry is doing a fine job but one that is not known to many. But that is true of any job in public relations. The private conversations, the personal contacts here and there, the furnishing of pertinent information to this or that group, the talks to small and large gatherings—these are the things which play such a large part in helping to interpret our profession and to publicize our work and objectives—and these are the very things which do not make headlines.

December 2.

Spent the morning meeting old friends and taking things easy. After lunch at a nearby restaurant where I saw the first quarter of the Army-Navy game on television, I joined the other members of the Legislative Committee for a joint meeting with the Executive Committee of the Board of Trustees. Also sitting in for the general discussion were the Chairman and Secretary of the Council on Medical Education and Hospitals, and Klem Whitaker and Leone Baxter. The purpose of the meeting was to discuss the types of legislation which might be introduced in Congress and the attitude which the A.M.A. should adopt toward them. Most of the three and a half hour session was spent in a discussion of the position which the A.M.A. should take with regard to the federal aid to medical education. Everyone in the room was asked to have his say and there was certainly plenty of live discussion and plenty of divergence of opinion. Is there a real need for financial aid to medical schools at the present time, and if so, how much? Could the financial aid be secured from other sources or would it have to come from the federal government? Would we be inconsistent in opposing federal subsidies in one field while we appear to approve of them in other fields? Is federal aid to medical education inevitable and would we be doomed to defeat if we oppose it? Is there a real shortage of physicians which calls for an increase in the number of M.D.'s being graduated each year?

Toward the end of the session one member of the group remarked that he felt like the man recently returned from Washington who said that he had finally joined the OGMIK club. "O, Gee, Am I Konfused. And," he added, "everybody in Washington is so confused that they even spell confused with a K."

We finally came to certain non-unanimous conclusions and these were submitted to the Board of Trustees which in turn will present them to the House of Delegates.

One of the group, Willis Huron of Michigan, had a guest card to the Union Club of Cleveland and invited some of the group to go with him for dinner. It is an old historic club built by a group of iron-moguls, and reflects the austerity of earlier days. In the party were Elmer Henderson, President of the A.M.A., John Cline, President-Elect, Louis Bauer, Chairman of the Board, Dwight Murray of California, Bing Blasingame of Texas, Tom Murdock of Conn., Gunner Gunderson of Wisconsin, Huron and myself. I was out of my element in this bunch of "big shots" but thoroughly enjoyed it. John Cline is coming down to speak to the Columbia and Greenville societies in February and has promised to come a couple of days early for some bird hunting around Florence. I just hope we can round up more coveys than I did the last time I went out.

December 3.

Awakened to the ring of the phone and Buck Pressly's voice, reminding me of our date for breakfast. Buck is making a real place for himself in the A.M.A., not only because of his genial personality which wins him a host of friends, but because of the capable way in which he represents the general practitioner's point of view on the Council on Medical Education and Hospitals.

After breakfast I had quite a chat with Frank Dickinson, head of the Bureau of Economics of the A.M.A. He has done much, through his studies, to clear up many false ideas which prevailed in the public mind and to show the progress which the medical profession has made in promoting the health of the people. He has recently made studies on maternal mortality rates and is impressed with the great strides which some of the southern states have made. Although our rates are still higher than the national average, because of the high percentage of colored population, our relative progress has been outstanding. He knows of the work done by our committees on Maternal Welfare (first under the chairmanship of Bob Siebel, and now under Decherd Guess) and he would like to get a feature story in one of the big magazines on the subject. It certainly is a story worth the telling and one that the public should know, and I hope we can get it told.

The Public Relations Conference got off to a start with a luncheon at which John Cline was the main speaker. The afternoon session was devoted to a discussion of the "Groundwork for a Successful Public Relations Program." I had planned to attend but when Donald Koonce of Wilmington, N. C. suggested that we go to the Cleveland Browns—Philadelphia Eagles professional football game, the temptation was too great. So along with 38,000 other partially demented individuals we watched the hard fought game in a cold drizzle. Got back from the game in time to welcome my roommate, Walter Mead, who had just come in from Florence, along with Jack Meadors.

The evening session of the conference was featured by an address by Mr. Louis B. Seltzer, editor of the Cleveland Press. One of the outstanding men in the newspaper field, Mr. Seltzer has been noted for his ability to see the needs of a community and the nation as a whole and not merely through the eyes of a particular group. He spoke on the general subject of "What a Community Expects of the Medical Profession." We hope to publish, in this Journal, part or all of his speech when it is available. Here are some of his thoughts—the people have been educated to want the best that medicine has to offer . . . . health is not only a personal matter, it is also a national asset or liability . . . . the costs of medical care are too high . . . . ninety percent of the medical profession are highly ethical and conscientious and they cannot afford to protect or condone that small percent who, through excessive charges, refusal to see patients, refusal to pay night calls, etc., are bringing criticism of the profession . . . . the formation of grievance committees has been a most progressive step . . . . medical care is not the exclusive concern of the M.D. . . . . if you get into politics, and you have already done so, do not confine your activities to medical affairs . . . . don't be just a pressure group . . . . the community expects so much of the doctor because it thinks so much of him.

December 4.

The morning was spent in the Public Relations Conference where the various activities which district and county societies could undertake, were discussed. The afternoon was devoted to another long session of the Legislative Committee. This committee, composed of nine men each representing a different section of the country, is supposed to serve as a liaison between the central office of the A.M.A., the Washington office of the A.M.A., and the various state medical societies. It is our function to get to the states, as

quickly as possible, information relative to proposed legislation in the Congress which deals with medical affairs, and also to get in return the reaction of the men back in the states toward policies which the A.M.A. should adopt with regard to the legislation. A large part of our time was spent in working out the details of our method of operation.

December 5.

Had breakfast with Hugh Smith, Buck Pressly, and Walter Mead. Hugh had come up the night before.

The House of Delegates was called to order at 10 A. M., with 193 out of a possible 197 delegates present—an excellent record. The morning and part of the afternoon was spent in hearing the reports of the officers, the Councils, and the introduction of resolutions.

Decherd Guess, following last June's session of the A.M.A., gave an excellent account, printed in this Journal, of the modus operandi of the House of Delegates with its Reference Committees, etc., so I will not repeat here. It was my luck to be appointed chairman of the Reference Committee on Amendments to the Constitution and By-Laws, and we had a number of resolutions referred to us.

During the evening Walter Mead and I, representing our Journal, attended a dinner sponsored by the State Journal Advertising Bureau—the Bureau which secures national medical advertising for state medical journals. (If anyone has read this far, ask me the next time you see me to tell you the story about "un-gah").

December 6.

The House of Delegates was called into special session at 9 A. M. Dr. Louis Bauer, Chairman of the Board of Trustees, announced that the A.M.A. was giving $500,000 from its Educational Campaign Fund to medical schools to help them in their present financial crisis. It is estimated that medical schools need about ten million dollars to meet their needs for the coming year. How much better it would be for this money to come from private sources rather than from the federal treasury—with the regulations and directives which would surely follow. It is hoped that this gift from the A.M.A. will set in motion a chain reaction amongst doctors, industrialists, philanthropic organizations, etc. which will raise the desired amount. The announcement was greeted with loud applause and the action of the Board was approved unanimously.

The rest of the morning was spent in hearing before our Reference Committee. Several proposed amendments were of general interest and we had about thirty present with most of them voicing their views. Two proposals which evoked considerable discussion were: making the President and President-Elect voting members of the Board of Trustees, and making Past-Presidents voting members of the House of Delegates for five years after their tenure of office. (Neither of these passed).

Following luncheon, our committee went into executive session, discussed the various proposals in the light of the arguments presented, and reached our conclusions and recommendations. These were then drafted and given to a secretary for typing.

The evening was spent at the party given by the Aces and Deuces. For years, those delegates from states which have only one or two delegates have felt embarrassed by the hospitality received at the hands of the larger delegations. The delegates from the larger state associations (i. e. N. Y., Penn., Cal.,) are constantly giving cocktail parties and buffet luncheons to which many of us are invited. For one or two delegates to return in kind would be financially back-breaking. So last June all of the one and two delegate groups got together and decided to pool our resources and give a real party for everybody.

We called ourselves the Aces and Deuces and sent out invitations to around 225. Wearing red carnations, we met them at the door and tried to be gracious hosts. It must have been a good party for almost 400 came, we had to send out for more refreshments, and finally had to dim the lights in the big ballroom to suggest that it was time to leave.

December 7.

The final session of the House of Delegates was held this morning. The References Committees all submitted their reports. Space will not allow for a resume of all the business transacted and I would certainly urge at least a cursory perusal of the printed minutes of the meeting which will appear soon in the Journal of the A. M. A.

The problem of federal aid to medical schools was to the fore and it was agreed that the medical schools need financial help but that every effort toward securing such aid from private sources should be exhausted before federal aid was sought, and that federal aid, should it come, should be so handled that there could be no interference of government in the policies and activities of the school.

The question of membership in the A. M. A. was settled as follows: all members of state medical societies are members of the A. M. A. in 1950 and as such are supposed to pay $25.00 dues. They will receive the Jour. A. M. A. beginning Jan. 1, 1951. If the dues, however, are not paid by Jan. 1, 1951, a statement will be sent from the Secretary of the A. M. A. to acquaint them with the fact. If the dues for 1950 are then not paid by Feb. 1, 1951, the men will be dropped from the rolls of A. M. A. membership and declared in arrears. Should these men wish to join the A. M. A. later they must pay for the one year's dues ($25.00) which they are in arrears plus the regular dues for the year in which they join. Those who have already paid their dues for 1950 will, of course, have nothing to worry about.

Furthermore, the number of delegates which a state will have in the House of Delegates of the A. M. A. will be one per thousand or fraction thereof of A. M. A. dues paying members in that state. Whether South Carolina will have 2 delegates in the House of Delegates in 1952 will depend upon the number of our membership who pay A. M. A. dues in 1951. At the present writing slightly over 900 of our membership of over 1100 had paid, and if this prevails next year we will be cut down to one delegate.

The afternoon was spent at a joint meeting of the House of Delegates and the 3rd Annual Conference of the National Educational Campaign. The highlight of the session was an address from William L. Hutcheson, General Chairman of the United Brotherhood of Carpenters and Joiners of America, and Vice-President of the American Federation of Labor. This address, Socialized Medicine is No Bargain, was broadcast over a national radio hookup, was published in the December 9 issue of the J. A. M. A., and is to be found in the Ten Point Program Section of this issue of our Journal. This is the first time that an outstanding labor leader has come out strongly against socialized medicine and the speech bears careful reading.

December 8.

By plane to Charlotte, by bus to Florence—to find work piled up and waiting to be done.

NEWS FROM WASHINGTON

LARGER ARMED FORCES, NEW CALL FOR PHYSICIANS IN SIGHT. Unless there is an about-face in military planning, substantial numbers of physicians not now anticipating military duty will have to be called up in the next year. Although military medical planners have made no announcement of new requirements, some facts are inescapably clear.

Between July 1 and December total military manpower was increased from 1,500,000 to about 2,200,000. Until the new Korean crisis, the goal was *2,800,000* by next July 1. Physicians to care for the additional men were expected to come mainly from doctor-draft registrants classified 1-A and 1-A-O, and reserves who otherwise would be so classified. However, the services now plan to speed up inductions and reach the *2,800,000 total by early spring.* This means that the present pool of 1-A's and 1-A-O's and draft-eligible reserves will be used up earlier than anticipated. After that, the *services will have to call on physicians not now classified* 1-A *or* 1-A-O *and possibly again reach into the ranks of reserves with World War II experience.*

In his request to Congress for additional defense money, President Truman did not specify a new manpower total, *but he left no doubt that a figure higher than the current goal of 2,800,000 would be set.* Mr. Truman said: "We now face the necessity of having to raise our sights both in terms of manpower and in terms of production."

It should be remembered that last fall the services' request for a *3,500,000* ceiling was not approved. If, in view of the new crisis they should get authorization for this total, *several thousand additional physicians would be needed.* Officially, military leaders decline to set a troop ratio for physicians, but unofficially some of them agree that four per thousand would not be too far from the actual figure. Against a 700,000 increase in troop strength, *This would mean almost 3,000 additional medical officers.*

NEW CDA TAKES OVER MEDICAL DEFENSE PLANNING. Medical and other phases of civil defense planning have been shifted from National Security Resources Board to the new *Civil Defense Administration,* which President Truman created by executive order. Extent of CDA's power at present is not clear, but legislation giving the agency unprecedented authority is pending in Congress. (The first bill on the subject, S.4162, was reviewed in CAPITOL CLINIC NO. 36.) Purpose of CDA is to knit together regional and local civil defense organizations and to give the federal government the right to use a strong hand if other organizations are unable to act in a disaster. Its *medical* program calls for establishment of regional medical offices and stockpiling medical supplies. Mr. Truman appointed Millard F. Caldwell, Jr., as director of CDA and said it would be financed with emergency funds pending action by Congress. Mr. Caldwell is a former governor of Florida and a former Congressman.

THE TEN POINT PROGRAM

M. L. MEADORS, DIRECTOR OF PUBLIC RELATIONS AND COUNSEL

HALF MILLION FOR MEDICAL EDUCATION

The most significant event at the interim session of the AMA House of Delegates was the announcement of the action by the Board of Trustees in appropriating $500,000 for the aid of medical schools. On the morning of December 6th at a brief special meeting of the House of Delegates, Dr. Louis Bauer, Chairman, announced that the Board had decided unanimously on this step. The amount is to be the nucleus of a fund which, it is expected, will be augmented by gifts from other sources, for this pressing need.

Within the past year the problem of providing expansion and improvement of facilities for educating and training more physicians has begun to plague the profession perhaps more than any other. One of the chief criticisms which the "Compulsioners" have been raising is that there are too few doctors and that the medical profession is in large part responsible. In fact, and unfortunately, a substantial number of honest, fair-minded, but misinformed people generally have the same mistaken idea. This resulted in the effort which has been made to drive through Congress a bill to provide Federal aid to Medical Education, with all the inevitable Federal control which would be involved.

The action of the A. M. A. in putting its own money on the line, to the tune of half a million dollars, followed by steady, earnest and continued effort on the part of its officers, members and component societies, to increase the fund to the full amount necessary for required assistance to medical schools, will answer the argument and the criticism more effectively than anything and everything that might have been said.

"SOCIALIZED MEDICINE IS NO BARGAIN"

William L. Hutcheson

(Mr. Hutcheson is General President, United Brotherhood of Carpenters & Joiners of America and Vice President of the American Federation of Labor. His address, which is here printed in full, was pre-

pared for delivery at a Joint Session of the House of Delegates of the American Medical Association and the Third Annual Conference of the A. M. A. National Education Campaign, Cleveland, Ohio, December 7, 1950. Mr. Hutcheson, due to illness, authorized the reading of his address to the Convention by his assistant, Mr. Peter E. Terzick, Editor of "The Carpenter.")

I am against socialized medicine. So is the organization which I have the honor of heading. At the Twenty-Sixth General Convention of the United Brotherhood of Carpenters and Joiners of America, held in Cincinnati last September 1, 300 delegates, representing better than 54 per cent of the total membership, voted down a resolution to support the National Health Program. This probably does not jibe with the fetlings of a good deal of the rest of the labor movement because much of the pressure for "free" medical care is coming from labor organizations. But it does reflect my sentiments and the sentiments of our recent convention.

Saving a dollar had never been distasteful to me. In fact I like to get as much for my money as the next man. That is one of the reasons why I oppose socialized medicine. It is no bargain. It looks cheap the way the backers present it, but when you dig down under the fancy layer of propaganda frosting you find that it can be mighty expensive. The British people have already discovered this fact. The July issue of International Labour Office, contains some very interesting data on the operation of the National Health Service in Britain. I quote a few lines of that report:

"The total (gross) cost of the National Health Service in 1948-1949, the first year of operation, greatly exceeded the original estimate. This was 265 million pounds, as against a revised estimate of 368 million pounds, with a net cost to the taxpayer of 278 million pounds. The revised estimate for the year 1949-1950 was 450 million pounds as against an original estimate of 352 million pounds. For the 1950-1951, the cost is estimated at 484 million pounds; in 1946 when the Bill was passed, the service was believed to cost 167 million pounds a year.

In case you don't understand what the International Labour Office is, I can best explain its functions by quoting a bit from its preamble:

"The International Labour Office is an association of nations, financed by Governments and democratically controlled by representatives of Governments, of management and of Labour organizations.

"Its purpose is to promote social justice in all countries of the world. To this end it collects facts about labour and social conditions, formulates minimum international standards, and supervises their national application."

The I. L. O.'s publication, "International Labour Review," is published in the United Kingdom. As an international organization, I. L. O's findings are supposed to be strictly impartial.

Getting back to the report; if I read it correctly, service that was supposed to cost 167 million pounds per year when the plan was set up in 1946 costs 484 million pounds per year, and the end is not yet in sight. By my old-fashioned kind of arithmetic that is an increase of better than 345 per cent and I am sure my poor old mother, who always made a dime to work for a quarter, would not consider that kind of proposition any bargain.

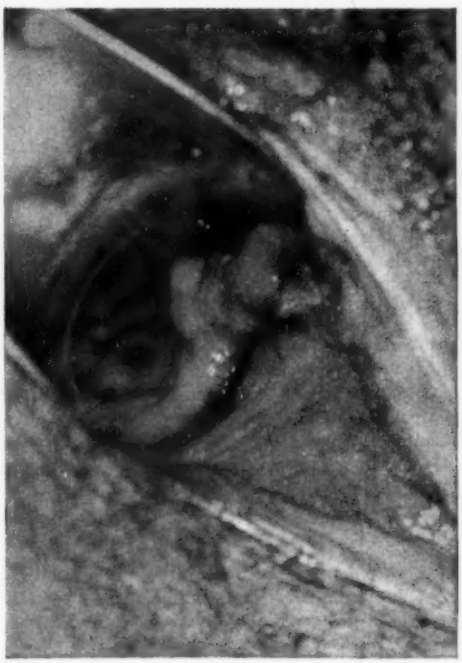
I know! I know! The socialists claim that money is of no consequence in the matter of national health; —getting the poor the same quality and quantity of medical care as the rich can get under private enterprise is the advertised objective of the National Health Program. That sounds fine, too; but on Page 57 of the I. L. O. report, I find the following sentences:

"Survey of the distribution of doctors by boroughs shows that certain wealthier districts (of London) have an average of one doctor for 1,261 patients, while in the inner East End there are 2,472, or twice as many patients, per doctor. For a group of southern boroughs, the average is 2,897."

If that isn't the "one house and one rabbit" recipe transferred from the meat pie maker's kitchen to the National Health program, then I need new reading glasses. I have tried to figure it from all angles but the answer I always come up with is that lumbago, shingles and bellyaches of London's South Siders get only half the attention that similar ailments get in the swankier districts. For all the planning that has been done, there is still an uneven distribution of doctors in London. If the backers of the National Health Program are to achieve their objective of equal health protection for all, the next step must be to tell doctors when and where and how they are to practice. Therein lies my greatest fear of socialization.

Socialization and death have one thing in common; you cannot be either a little bit socialized or a little bit dead. It is whole hog or nothing. After two years of the National Health Program, London doctors still have preferences as to where they want to practice. By compulsion of one kind or another, somebody is going to have to shoo doctors away from the fancy neighborhoods into the tenement districts or the program will wind up where it started. When the government is given authority to tell one group or one profession where and how its members are to work, no other group or profession can be safe for long.

If the day ever comes to America when Uncle Sam usurps the power to dictate to doctors under a health plan, it will be a sad day for carpenters. Adequate housing is still an unsolved problem in this country, especially for the poor. If it's logical to nationalize the medical profession to get more medical service for the poor, it is equally logical to nationalize the home construction industry to get roofs over the heads of the lower income groups.



Photographs courtesy of Louis H. Block, M. D., Chicago

a. Ulcerative amebiasis during Diodoquin therapy. In this patient with severe hemorrhage, edema and necrosis, the ulcers show healing, with many scars. No active lesions are seen.

b. Three months later, after continuing Diodoquin therapy, extensive scarring indicates healing. Inflammation is further reduced and only superficial areas of inflammation remain.

AMEBIASIS: "Diodoquin is probably the least toxic of the drugs and contains the most iodine."[1] "Diodoquin now appears to us to be the drug of choice [for outpatients] because of its effectiveness and because it is tolerated well by most patients."[2]

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ACCEPTED COUNCIL ON PHARMACY AND CHEMISTRY AMERICAN MEDICAL ASSOCIATION

1. Johnson, S. K.: Mississippi Doctor 27:69 (July) 1949.
2. Merritt, W.: J. Florida M. A. 35:351 (Dec.) 1948.

RESEARCH IN THE SERVICE OF MEDICINE **SEARLE**

I do not know much about doctors, but I know quite a bit about carpenters. They are an independent lot. They want to work where and how they please. The first bureaucrat who told a carpenter he had to work in Little Rock when he wanted to work in Lancaster would be gumming his food for lack of teeth. Carpenters want to be free agents; free to work where they want; free to negotiate the terms of their wages and working conditions through collective bargaining; yes, even free to leave the industry and try their luck at something else if the spirit moves them.

They will retain these freedoms only so long as all other groups retain theirs. Socialization is like a wolf with a tapeworm; once it starts gnawing, it never can stop. Socialized medicine would only be the first bit of our free enterprise system; it would not be many years before the carpenters would be feeling the teeth of socialization on the seats of their overalls. Any way you look at it, socialized medicine is no bargain and the carpenters want none of it.

I know the backers of the national health plan in this country resent the term "socialized medicine." They have all sorts of arguments to "prove" that doctors and patients will remain free as the air under their program. They make a strong case. Perhaps if human nature were less ornery and less avaricious, an idealistic health program might work out all right. But so long as people have preferences, so long as Park Avenue has more appeal than Hell's Kitchen, there will be an uneven distribution of doctors under any plan that does not contain compulsion. And once compulsion enters the picture, the rights and freedoms of all citizens stand in jeopardy. To me, it is as simple as that. For forty years, I have fought communism tooth and toenail because I do not want anyone pushing me around. I certainly do not want to put my head into a socialization noose voluntarily when the results can be as undersirable as communism.

I have always respected the medical profession for the fine contribution American medicine has made to human welfare. As I watched your battle against regimentation during the past two years, I have added to that respect. The physicians of this country have shown that they are willing to fight for their conviction. I salute you today not only as doctors but as crusading citizens as well. We in the labor movement have our own cross of regimentation to bear. The fight you are making is part of the same war. It is a war against concentration of authority in a few hands in Washington. As a veteran of forty years in the labor movement, I know what it is to fight for human rights. I am happy to take my stand beside you.

MEDICAL PR CONFERENCE TAKES UP COUNTY PROBLEMS

Getting down to the "brass tacks" of medical public relations, more than 350 medical PR leaders devoted their Third Annual Medical Public Relations Conference to "Effective County Society PR."

In a sound diagnosis of PR problems, the conferees—many of them practicing physicians—concluded that their problems can only be solved by the individual doctor in his dealings with his patients and through his active participation in the work of his local medical society.

The two-day conference, held December 3 and 4 in Cleveland's Hotel Statler, just prior to the Clinical Session of the American Medical Association, is a service of the A. M. A.'s. public relations department, directed by Lawrence W. Rember, Chicago.

Work sessions took up "Groundwork for a Successful PR Program," "County Societies and the Legislative Scene," "Activities with a Purpose," and "Medical Public Relations in Small, Medium and Large Communities." Outstanding public relations leaders from medical societies across the nation contributed their ideas to the conference, the success of which was indicated by a registration nearly double that anticipated.

The conference got under way with a noon luncheon at which Dr. John W. Cline of San Francisco, president-elect of the A. M. A., gave the keynote address. Dr. Cline was introduced by Dr. George F. Lull of Chicago, secretary and general manager of the A. M. A., who was toastmaster.

Dr. Cline advised doctors that to build good public relations "medicine must first give good medical care and next provide an opportunity for enrollment in voluntary health insurance plans." He said, "some doctors fail to realize the defects of their own practices and must be educated to them."

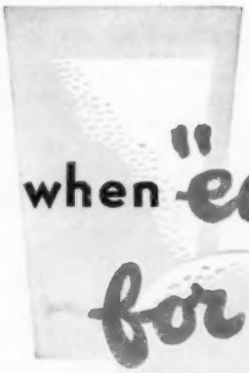
One of the highlights of the conference was the annual banquet at which Louis B. Seltzer, editor of the Cleveland Press, told doctors "what the community expects of the medical profession."

"The American public is health conscious as never before," Seltzer said. "Being aware of the best in medicine, the public naturally wants it. I do not think anyone will regard this as unreasonable."

Health, continued Seltzer, is more than a personal matter. It is a national asset upon which our national security depends.

"The public has so high a regard, so sincere a veneration for the honest and competent physician that you cannot afford to protect the doctor who is not faithful to his vows and to the highest ideals of his profession," Seltzer stated.

Seltzer congratulated doctors on setting up grievance committees to handle complaints involving doctor-patient relationships and urged closer relations of the press and the medical profession to tell the doctors' story to the public.



when "eating for two"

...plenty of citrus fruits

Most obstetricians today insist that their mothers ingest plenty of vitamin C, particularly after the first trimester[1] (8 oz. citrus juice during pregnancy, 12 oz. while lactating).[6] Pregnancy is thus made safer because toxemia is thereby reduced.[7] Also, more babies are born normally and with a higher birth weight, while premature and still births are fewer.[3,4] In addition, both maternal and infant health is improved postpartum when an adequate vitamin C regimen has been followed throughout pregnancy.[2] Most mothers enjoy the flavor of fresh Florida citrus fruits (so rich in vitamin C and containing other nutrients*), as well as the energy pick-up provided by their easily assimilable fruit sugars.[5]

* * *

**Citrus fruits—among the richest known sources of vitamin C—also contain vitamins A and B, readily assimilable natural fruit sugars, and other factors, such as iron, calcium, citrates and citric acid.*

FLORIDA CITRUS COMMISSION
LAKELAND, FLORIDA

References:

1. Burke, B. S. and Stuart, H. C.: J.A.M.A., 137:119, 1948. 2. Burke, B. S. et al.: Am. J. Obst. & Gynec., 46:38, 1943. 3. Burke, B. S. et al.: J. Nutrition, 26:569, 1943. 4. Javert, C. T. and Finn, W. F.: Texas State J. Med., 46:745, 1950. 5. McLester, J. S.: Nutrition and Diet in Health and Disease, Saunders, Phila., 4th ed., 1944. 6. National Research Council: "Recommended Food and Nutrition Board, Daily Allowances for Specific Nutrients," Wash., D. C., 1948. 7. People's League of Health: J. Lancet, 2:10, 1942.

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Dr. Louis H. Bauer, Hempstead, N. Y., chairman of the A. M. A. Board of Trustees, was toastmaster at the banquet. He pointed out, "The thought of those active in the campaign against the socialization of medicine is not for the doctor but for the individuals who would suffer from it."

The president of the A. M. A., Dr. Elmer L. Henderson of Louisville, Ky., gave a "salute to county societies," at the banquet. Said Dr. Henderson:

"The quickest way to eliminate the threat of socialized medicine is to meet the people's need for adequate medical care at a price they can pay." Henderson commended county societies for developing positive public relations programs.

The first afternoon work session was entitled "Groundwork for a Successful PR Program." Chairman was Dr. Cleo M. Miller of Nashville, Tenn., president of the Nashville Academy of Medicine.

The subject of "Who Directs the Work" was discussed by Dr. Russell B. Roth of Erie, Pa., secretary of the Erie County Medical Society. Outlining the method his society used to promote action, Dr. Roth offered a recipe for effective PR: "Take one executive committee and stir well. Hold meetings in an atmosphere encouraging thoughtful discussions. Use a key, hard-hitting group to stimulate other committees."

"Who Pays the Bills?" was answered by Arthur Tiernan of Evansville, Ind., executive secretary of the Vanderburgh County Medical Society. Tiernan explained that his society supplements dues with a system of "token payments from township trustees and the county department of welfare for treatment of the hospitalized township and welfare cases." The idea, he said, grew out of a survey indicating that people in the community had no idea of what medical services were available.

"Building the Program" was discussed by Dr. Charles S. Lakeman, who told conferees, "You've got to know what it is you want to build; you've got to have a plan calling for good organization and cooperation of membership." Lakeman, of Rochester, N. Y., public relations chairman of the Monroe County Medical Society, said his society analyzed community medical needs, told people the truth about the needs and set about public-relations-wise to satisfy the needs.

"By enlisting our members to do more and more public relations we believe we have the answer through individual activity, the key to membership enlistment," Dr. R. B. Chrisman, Jr., secretary of the Dade County (Miami, Fla.,) Medical Society, said. He talked on the topic, "Enlisting the Membership." A discussion period followed the talks.

A showing of Louis de Rachemont's new documentary film, "Here's Health," with promotion comments by Lawrence W. Rember, assistant to the general manager of the A. M. A., followed the work session.

The Monday morning session opened with a discussion of "County Societies and the Legislative Scene," chairmaned by Dr. Gunnar Gundersen of La Crosse, Wisc., chairman of the A. M. A. executive committee and a member of the board of trustees.

Dr. Dwight H. Murray of Napa, Calif., in discussing "The Legislative Committee and You," told medical PR conferees that they must "build good relationships at home with congressmen." Legislators, he said, want to know why, in terms of the welfare of our people, the medical profession takes its stand on issues. Dr. Murray is a member of the A. M. A. board of trustees and the chairman of the committee on legislation.

"What's Ahead in Washington" was outlined by Dr. Joseph S. Lawrence of Washington, D. C., director of the Washington office of the American Medical Association.

Doctors must be thoroughly convinced of what is wanted and be ready to support the necessary legislation, Dr. Lawrence said. He advised his audience to write congressmen, request copies of bills, and "let them know you're interested or disgruntled." Dr. Lawrence told conferees what to anticipate in legislation during the coming months.

The latter part of the morning was devoted to "Activities with a Purpose," reports on projects of medical societies which in actual test have proved effective. Chairman of the session was Rollen W. Waterson, Oakland, Calif., executive secretary of the Alamenda County Medical Society.

Dr. Eugene A. Ockuly of Toledo, Ohio, president of the Toledo Academy of Medicine, talked on "A Family Doctor For Every Family," an activity involving his society's professional relations committee. "MDs have a rightful place in community health groups and must cooperate," said Dr. Fred Sternagel, chairman of the Iowa State Medical Society's committee on medical service and public relations. Dr. Sternagel told of his society's "Community Health Projects."

"The PR Approach to Business Methods" was the subject of Dr. E. L. Bernhart's report. Dr. Bernhart of Milwaukee, Wisc., president of the Medical Society of Milwaukee County, discussed the medical-economic activities of the Milwaukee society. The topic of "Working With Other Health Profession" was taken up by Dr. William Skipp of Youngstown, Ohio, chairman of Mahoning County's allied professions committee. Dr. Skipp outlined the makeup and functions of the committee in the political as well as social areas.

Dr. Carl F. Vohs of Clayton, Mo., president of Missouri Medical Service, discussed "Promoting Vol-

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untary Health Insurance," asserting that provision of adequate medical care is a local problem and that "patients must understand" health insurance so that difficulties do not arise.

The timely subject of "The Doctor and Civilian Defense" was presented by Dr. Frederic B. Davies, Scranton, Pa., of the committee on emergency disaster medical service of Pennsylvania's state society. "You can't turn your back on civilian defense," Dr. Davies told conferees. He stressed that a special committee must be formed to map out plans for medical work in any kind of emergency.

A noon luncheon in the Grand Ballroom was highlighted by an address by Richard W. Mills, executive secretary of the Fond du Lac, Wisc., Association of Commerce. Mills, speaking on "What IS This American Way?" illustrated to his audience what communism and socialism are and how they are attempting to move into our American system.

Dr. F. F. Borzell, Philadelphia, speaker of the A. M. A. House of Delegates, was toastmaster at the luncheon.

Concluding session of the 1950 Medical Public Relations Conference was "The Idea Exchange." All conferees assembled after luncheon to hear general remarks by Dr. G. A. Woodhouse of Pleasant Hill, Ohio, secretary-treasurer of the Miami County Medical Society. Then the group split into three discussion sections to take up problems of medical public relations in small, medium and large communities.

Dr. John E. McDonald of Tulsa, Okla., chairmaned the medium-sized community discussion. Dr. McDonald is public policy committee chairman of the Oklahoma State Medical Society. The president-elect of the Wayne County Medical Society, Dr. Arch Walls of Detroit, Mich., served as chairman for the large community group. Dr. Woodhouse was in charge of the section for small communities.

Later in the afternoon the three groups reassembled to hear brief reports from each discussion chairman. In summarization, Dr. Woodhouse pointed out the overlapping problems of all communities. He said, "The large attendance is an indication of the value of this two-day conference. The problem of medicine engaging in social welfare activities can never be pushed behind the darkening curtain."

CORRESPONDENCE

Editor
Journal of South Carolina Medical Association
Florence, South Carolina
Dear Doctor:

I am writing to extend a cordial invitation to members of the South Carolina Medical Association to attend a two-day Sectional Meeting of the American College of Surgeons at Hot Springs, Virginia, on February 26 and 27. The Homestead will be headquarters for the meeting and requests for hotel accommodations should be directed to The Homestead in Hot Springs.

The program for this meeting will include new surgical motion pictures, a special program on trauma, a cancer symposium, and panels or papers on The Effect of Vasodilator Drugs on the Circulation of the Extremities, Chest Injuries, Fractures about the Ankle Joint, Neck Surgery, Peptic Ulcer, Cancer of the Tongue and Mouth, Cancer of the Cervix, Cancer of the Lung, Injuries to the Biliary Ducts, Ulcerative Colitis, Surgical Aspects of Acute Head Injuries, Rehabilitation of Severely Burned Patients by Plastic Surgery, Emergencies Arising During Operation, and Surgery of the Colon, Anus and Rectum.

A five-dollar registration fee will be required, except from Fellows and members of the Junior and Senior Candidate Groups of the College, and interns and residents, but we are confident that the physician or surgeon in practice will find the program worth many times the registration fee.

As Chairman of the Committee on Arrangements I can assure you that the Fellows of the College in Virginia will give full cooperation in assisting members of the South Carolina Medical Association to take full advantage of this excellent meeting if they will come to Hot Springs on February 26 and 27.

Sincerely yours,
Claude C. Coleman, M.D., F.A.C.S.
Chairman, Committee on Arrangements

DEATHS

FOREST LAFON CARPENTER

Dr. F. L. Carpenter, 71, died November 22, at the McLeod Infirmary in Florence, following a heart attack at his home in Latta.

Dr. Carpenter was born in Hustonville, Kentucky. He received his education at the University of Kentucky, Vanderbilt School of Medicine (class of 1904) and took graduate work in New York. He had practiced medicine in Latta for the past forty-six years.

Dr. Carpenter was a member of the American Medical Association, a charter member and twice president of the Pee Dee Medical Society, a member and many times president of the Dillon County Medical Society. He was also a Shriner. Dr. Carpenter served his community not only as a physician but, also, as a loyal and faithful citizen.

Dr. Carpenter is survived by his widow and one son, Dr. F. L. Carpenter, Jr., of Statesville, North Carolina.

JOSEPH ASBURY DILLARD

Dr. J. A. Dillard, 60, died suddenly at his home in Columbia on November 30.

A native of Greensboro, Georgia, Dr. Dillard was graduated from the Emory University School of Medicine. He interned at the Southern Pacific Hospital in Houston, Texas, and later served as an officer in the Medical Corps during World War I. He had practiced medicine in Columbia since 1920. Known to his friends and patients as "Dr. Joe," he had endeared himself to hundreds in the city and county.

Dr. Dillard is survived by his widow, one son and one daughter.

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2 . . . light up your present brand

DON'T INHALE. Just take a puff and s-l-o-w-l-y let the smoke come through your nose. Notice that bite, that sting? Quite a difference from PHILIP MORRIS!

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Proc. Soc. Exp. Biol. and Med., 1934, 32, 241-245; N. Y. State Journ. Med., Vol. 35, 6-1-35, No. 11, 590-592; Laryngoscope, Feb. 1935, Vol. XLV, No. 2, 149-154; Laryngoscope, Jan. 1937, Vol. XLVII, No. 1, 58-60

NEWS ITEMS

Dr. J. Lloyd Mims has opened offices in Spartanburg for the practice of Dermatology. He has recently completed examinations of the American Board of Dermatology and Syphilology.

Dr. Asa M. Scarborough of Greenville, was inducted as a Fellow of the American College of Surgeons, at the meeting of the College held in Boston in October.

Dr. Kenneth M. Lynch, Jr., has opened offices in Charleston for the practice of urology.

Dr. John A. Ritchie is now practicing psychiatry in Greenville.

The American College of Allergists will hold its seventh annual meeting at the Edgewater Beach Hotel, Chicago, Illinois, February 12-13-14, 1951. This year these will be section meetings: Psychosomatic aspects of allergic diseases, under the leadership of Harold Abramson, M.D. of New York; on Pediatrics, under Bret Ratner, M.D. of New York; on Allergies of the Nose and Throat, under George Shambaugh, M.D. of Chicago; on Allergic Diseases of the Skin, under Rudolph Baer, M.D. of New York City; and the Allergic Aspects of Rheumatism and Arthritis, under George Rockwell, M.D. of Cincinnati, as well as a general session of the College when hay fever, asthma and the newer drugs will be discussed under the leadership of John Mitchell, M.D. of Columbus, Ohio, the President of the College.

This year the College is trying for the first time the experiment of offering its post collegiate instructional course on the three days just preceding its annual conclave. This course has been arranged with the thought in mind that 10% or more of all the patients in a physician's practice have an allergic component in their complaint. (The faculty consists of some 25 outstanding allergists.) The course is therefore an extremely practical one designed for any physician who wants to learn the basic principles of diagnosis and treatment of allergic individuals and techniques that are useful in the management of these patients. A fee of $35.00 will be charged for the three-day course lasting through February 9-10-11. For further information and registration write Fred Wittich, M.D., Secretary-Treasurer, American College of Allergists, LaSalle Medical Building, Minneapolis, Minnesota.

WOMAN'S AUXILIARY
SOUTH CAROLINA MEDICAL ASSOCIATION

President: Mrs. A. F. Burnside, Columbia, S. C. **Publicity Secretary: Mrs. Weston Cook, Columbia, S. C.**

MEDICAL PR

As in all organizations, success and progress depend upon continuity in effort. Within the past few years, we have earned a place for ourselves by proving to be an important ally and weapon for the medical profession in our State. We wish to continue to work effectively in the interest of free enterprise, American medicine, and the freedoms of the American way of life. We hope to accept the challenge of the American Medical Association to bring about better relations between the medical profession and the public. With the guidance and approval of our Advisory Committees, it is our ambition to so direct our interests and activities that the American people may become better informed of the functions and policies of the A.M.A. and its component state and county societies, that we may earn public understanding and acceptance.

All methods of procedure must necessarily vary as to community needs and interests; nevertheless, the main objectives are the same. The Korean war has made many changes, so we must be flexible and changeable. With the establishment of defense programs, we must be ready to help with wartime community health problems whenever possible.

We should cooperate with the presidents and program chairmen of other organizations in the promotion of desirable health programs, provide trained speakers on health. Do not forget, however, that we, as individuals, can do much to help in the splendid objectives of the Medical Auxiliary. Make new friends, join different organizations and become a key member of each. We can serve as a liaison between the medical profession and the public. Every doctor's wife is needed as an auxiliary member, for as doctors' wives, we have a great obligation. Let us be Worthwhile Citizens!

Mrs. P. M. Temples
Public Relations Chairman.

CHICAGO CONFERENCE

The seventh conference of state presidents and presidents-elect of the Woman's Auxiliary to the American Medical Association was held on November 2 and 3 in the Hotel La Salle, Chicago, Ill. Mrs. Arthur A. Herold, president, opened the meeting, gave her report, and presented Mrs. Harold F. Wahlquist, president-elect, who presided over the conference. Only three states and Hawaii failed to have representation, and South Carolina was represented by both its president and president-elect.

Among the speakers of national prominence were: Dr. Earnest B. Howard, Assistant Secretary of the A.M.A.; Dr. George M. Lyons, Special Assistant of Atomic Medicine, Veterans Administration; Dr. W. W. Bauer, author of "Santa Claus, M.D., who spoke "Health Education Media for the Woman's Auxiliary;" Dr. Thomas G. Hull, whose subject was "Use of Exhibits and Motion pictures in Health Education;" Miss Leone Baxter and Mr. Clem Whitaker, directors of the National Education campaign of the A.M.A.

One of the most interesting and informative features of the conference was the form of panel discussion used on four major phases of Auxiliary work. The national chairmen acted as moderators, and the state presidents, who had been assigned topics beforehand, took part. The four panels arranged were on Organization with Mrs. Leo J. Schaefer as moderator, Public

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The Keeley method of treatment recognizes that acute alcoholism first must be medically treated as a disease before other curative forces can be effective. Each patient is given individual medical attention and guidance toward rehabilitation. Psychotic patients are not accepted.

The Keeley method of treatment combines the latest medically proven and accepted techniques with the experience of over 50 years clinical work in treating alcoholics exclusively. Keeley maintains its own laboratories at Dwight, Illinois, for research in therapy and rehabilitation.

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Only consent patients are accepted. The conditioned reflex treatment and the use of unnecessary restraint are rejected. Rather, facilities and staff are teamed to create an atmosphere that will enable each patient to understand and accept the responsibility in working toward his own rehabilitation.

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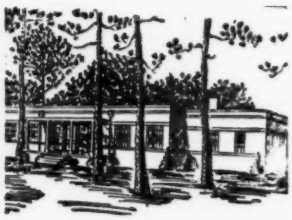

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Relations with Mrs. Theodore E. Heinz as moderator, Legislation with Mrs. Edgar E. Quayle as moderator, and Today's Health with Mrs. Joseph W. Kelso as moderator. South Carolina was most ably represented on the Public Relations panel by our president, Mrs. Alfred F. Burnside, who spoke on our maternal welfare program of last year.

Another feature of the conference which afforded special pleasure to those attending was the Regional Breakfast. The national organization is divided into four regions with a vice-president from each. Quite naturally, we are in the Southern Region, and we are represented on the national board by the third vice-president, a most charming woman from Little Rock, Arkansas, Mrs. Mason G. Lawson. The informal discussion at this breakfast was particularly helpful because regional characteristics make the same problems.

Your president and president-elect feel that this conference is of the greatest significance, and we wish that every Auxiliary member could have attended.

Mrs. Kirby D. Shealy
President-elect

EDISTO AUXILIARY MEETING

Doctor's wives of the Edisto Medical Auxiliary, at their regular luncheon meeting Tuesday, October 17th, were reminded of their three-fold responsibility—to themselves, their doctor husbands and their community—in a talk given by Mrs. Alfred Burnside of Columbia, president of the state medical auxiliary.

Mrs. Burnside also listed plans for the year, including a reminder of the state convention at Myrtle Beach in May, the observance of Doctor's Day in March, an explanation of the state budget and a reminder to subscribe to the state bulletin containing auxiliary news. She also discussed the student loan fund, which two student nurses are now using.

The speaker was introduced by Mrs. Vance Brabham, program chairman. Also a special guest at the meeting was Mrs. Kirby Shealy of Columbia, president-elect of the state medical auxiliary.

Mrs. James Gressett conducted the business session before the luncheon, when the group pledged their support to all health projects of the country; a committee was appointed to plan entertainment in honor of the new nursing class; and members were urged to attend the cancer movie Tuesday night.

Two new members, Mrs. H. L. Tuten and Mrs. George Wyatt, were welcomed into the auxiliary. Nineteen regular members were present.

Prior to Mrs. Burnside's talk, a tempting luncheon was served. The u-shaped tables were decorated with coral vine and zinnias in matching shade. White gladioli in a silver pitcher were used on the mantel, and foliage was used at other points in the ballroom.

YORK COUNTY MEETING

Fourteen members were present for the November meeting of the York County Mdical Auxiliary which was held at the Rock Hill Elk's Club. A Dutch luncheon was served.

After the roll call and the reading of the minutes of the last meeting reports from officers and committee chairmen were heard.

Mrs. Alton Brown, Nurse Recruitment chairman reported that the student nurses and personnel of the county hospital were very appreciative of the tickets given them to the Artist Concert Course at Winthrop College by the Auxiliary and had already enjoyed four concerts. She announced that plans were being made for a party for the student nurses Christmas and a shower of books for the library at the nurses home would be given.

THE ATLANTA GRADUATE MEDICAL ASSEMBLY

MUNICIPAL AUDITORIUM ANNEX

ATLANTA, GEORGIA

February 5, 6, 7, 1951

MONDAY—February 5

8:00 Registration
9:40 Dr. Fred W. Rankin: The Modern Management of Cancer of the Colon.
10:05 Dr. Sara M. Jordan: Cancer of the Stomach.
10:30 Dr. Waltman Walters: Cancer of the Stomach.
10:55 Dr. T. Leon Howard: Tumors of the Upper Urinary Tract.
11:20 Dr. Carleton B. Peirce: To be announced.
11:45 Dr. Waltman Walters: Surgery of the Biliary Tract.
12:10 Dr. George J. Thomas: Fire and Explosive Hazards in Hospitals.
Lunch.
2:00 Dr. John T. Godwin: Nevi and Melanoma.
2:25 Dr. Fred W. Rankin: Modern Trends in the Management of Cancer of the Rectum.
2:50 Dr. Grayson Carroll: Bacteriological Studies in Relation to Choice of Antibiotic Therapy.
Review of Exhibits.
3:35 Dr. F. William Sunderman: Laboratory Aids in the Management of the Surgical Patient.
4:00 Drs. Jordan, Rankin, Walters and Peirce: Symposium — Cancer of the Stomach and Bowel.
Dinner.
8:00 Dr. George Van S. Smith: Functional Bleeding of the Endometrium.
8:30 Dr. Winchell McK. Craig: The Importance of Intraspinal Lesions in General Diagnosis.
9:00 Dr. Sara M. Jordan: The Management of Peptic Ulcer.

TUESDAY—February 6

8:00 Dr. Warren W. Quillian: Care of the Premature Infant.
8:25 Dr. John Parks: Urinary Tract Infections in Pregnancy.
8:50 Dr. T. Leon Howard: Childhood Pathology of the Urinary Tract.
9:15 Dr. Grayson Carroll: The Clinical Treatment of Urinary Infection.
9:40 Dr. J. S. Speed: Minor Surgery of the Foot.
Review of Exhibits.
10:30 Dr. Richard B. Capps: The Diagnosis and Treatment of Chronic Hepatitis.
10:55 Dr. John T. Godwin: Radiocautographic Localization and Pathological Effects of Iodine 131.
11:20 Dr. Warren W. Quillian: Diarrhea in Children.
11:45 Drs. Jordan, Walters and Capps: Symposium: Jaundice.
Lunch.
2:00 Dr. George Van S. Smith: Office Gynecology.
2:25 Dr. John Parks: Placental Complications.
2:50 Dr. George J. Thomas: Obstetrical Analgesia and Anesthesia.
Review of Exhibits.
Dr. Carleton B. Peirce: X-ray Treatment of Breast Cancer.
4:00 Drs. Smith, Parks and Godwin: Symposium: Tumors of the Ovary Reception.

WEDNESDAY—February 7

8:00 Dr. Irvine H. Page: Diagnosis and Treatment of Hypertension.
8:50 Dr. Winchell McK. Craig: The Relative Value of Surgery in the Treatment of Progressive Hypertension.
9:15 Dr. Walter Bauer: Rheumatoid Arthritis, a Systemic Disease.
Review of Exhibits.
10:30 Dr. Richard B. Capps: Diagnosis and Treatment of Amebiasis and Amebic Hepatitis.
10:55 Dr. F. William Sunderman: Some Clinical Aspects of Serum Electrolytes with Particular Reference to Sodium and Potassium.
11:20 Dr. Samuel Proger: Obesity and Heart Failure.
11:45 Drs. Craig, Page and Proger: Symposium: Hypertension.
Lunch.
2:00 Dr. John R. Mote: Newer Concepts Concerning the Role of the Adrenal Cortex in Health and Disease.
2:55 Dr. J. S. Speed: Surgery in Chronic Rheumatoid Arthritis.
Review of Exhibits.
3:35 Dr. Samuel Proger: Coronary Insufficiency.
4:00 Drs. Bauer, Speed, Proger and Mote: Symposium: ACTH.

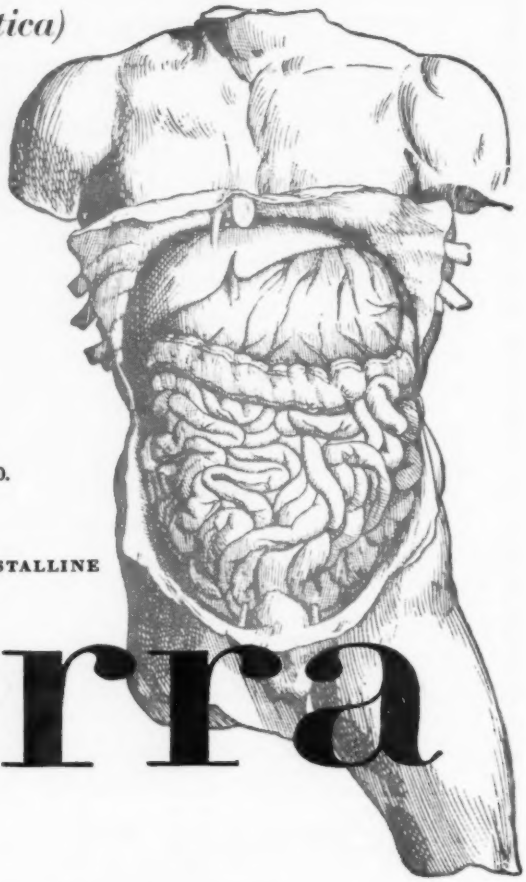
If you would like us to make your hotel reservation, may we suggest that you send your $15.00 registration fee, payable to THE ATLANTA GRADUATE MEDICAL ASSEMBLY, to Mrs. Stewart R. Roberts, 768 Juniper St., N.E., Atlanta, Georgia.

POSITIVE CLINICAL FINDINGS IN CERTAIN

In Amebiasis (E. histolytica)

"In daily doses of 1.0 and 2.0 grams by mouth for ten days, terramycin therapy resulted in the disappearance of E. histolytica from the stools of all but one of 22 patients. Parasitic relapse occurred in this individual on the eleventh day after treatment, whereas in the remaining 21 subjects, the stools have remained negative to date."

Most, H., and Van Assendelft, F.:
Ann. New York Acad. Sc. *53*:427 (Sept. 15) 1950.



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Clinical findings covering a wide range of bacterial and rickettsial as well as several protozoan infections indicate that:

1. *Terramycin may be highly effective even when other antibiotics fail.*
2. *Terramycin may be well tolerated even when other antibiotics are not.*

INFECTIONS OF THE GASTROINTESTINAL TRACT

In Dysentery due to Shigella paradysenteriae

Six cases, Terramycin treated—

"The diarrhea, which was pronounced in each case, stopped within 48 hours in the case of four patients and within 72 hours in the other two. . . . In all cases, the organism disappeared from the stool after treatment was started and did not reappear."

Dowling, H. F.; Lepper, M. H.; Caldwell, E. R., and Spies, H. W.: Ann. New York Acad. Sc. 63:433 (Sept. 15) 1950.

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Dosage: On the basis of findings obtained in over 150 leading medical research centers, 2 Gm. daily by mouth in divided doses q. 6 h. is suggested for most acute infections.

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100 mg. capsules, bottles of 25 and 100;
50 mg. capsules, bottles of 25 and 100.

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Mrs. W. C. Twitty reported that she had received four subscriptions to The Bulletin and Mrs. W. H. Williams reported on a drive for subscriptions to Today's Health.

Mrs. S. F. Strait reported on the executive board meeting that was held in Columbia in October. The Auxiliary voted to continue our project of nurse recruitment and to take over the sale of T. B. seals in December.

The president, Mrs. Quantz, reported that the Auxiliary had been called on to help with the United Fund Drive. Five dollars was donated by the Auxiliary to the United Fund.

The Auxiliary heard a most interesting and informative paper on the family of Johns Hopkins given by Mrs. W. D. Rice.

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Loss of Time: Pays $400.00 per month for Total Disability due to SICKNESS up to	**$9600.00**
Hospital or Graduate Nurse at home, $200.00 per month, additionally, up to	**400.00**
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